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:

Mode	Channel	Test Results	Conclusion
802.11a	5180 MHz	Fig.34	P
	5320 MHz	Fig.35	P
	5500 MHz	Fig.36	P
	5700 MHz	Fig.37	P
802.11n HT20	5180 MHz	Fig.38	P
	5320 MHz	Fig.39	P
	5500 MHz	Fig.40	P
	5700 MHz	Fig.41	P
802.11n HT40	5190 MHz	Fig.42	P
	5310 MHz	Fig.43	P
	5510 MHz	Fig.44	P
	5670 MHz	Fig.45	P
802.11ac HT20	5180 MHz	Fig.46	P
	5320 MHz	Fig.47	P
	5500 MHz	Fig.48	P
	5700 MHz	Fig.49	P
802.11ac HT40	5190 MHz	Fig.50	P
	5310 MHz	Fig.51	P
	5510 MHz	Fig.52	P
	5670 MHz	Fig.53	P
802.11ac HT80	5210 MHz	Fig.54	P
	5290 MHz	Fig.55	P
	5530 MHz	Fig.56	P

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Conclusion: PASS

Test graphs as below:

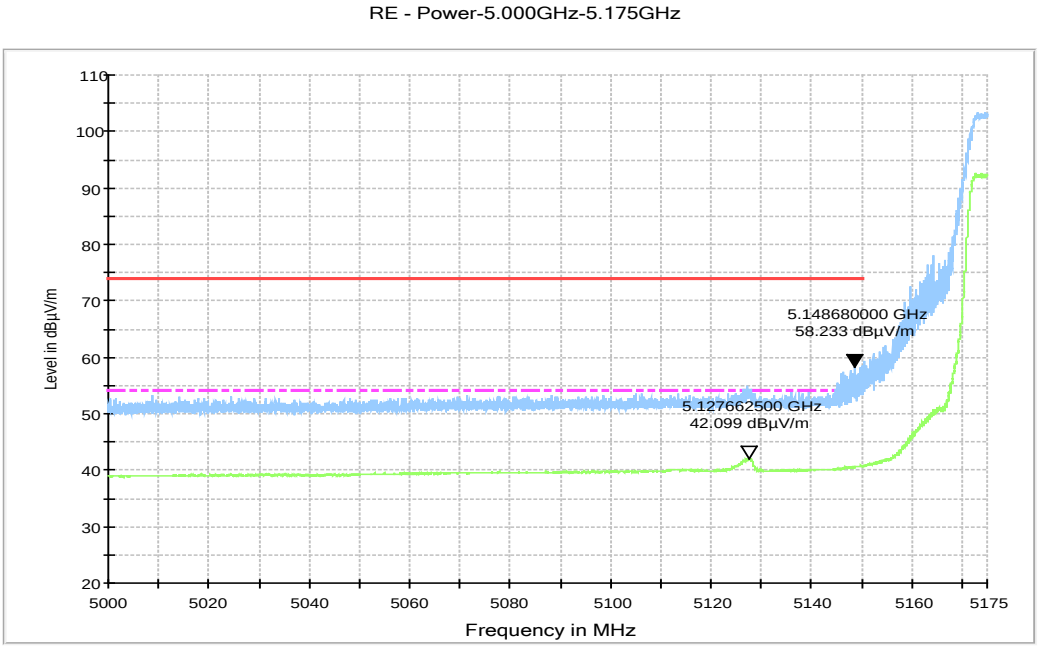

Fig.34 Band Edges (802.11a, 5180MHz)

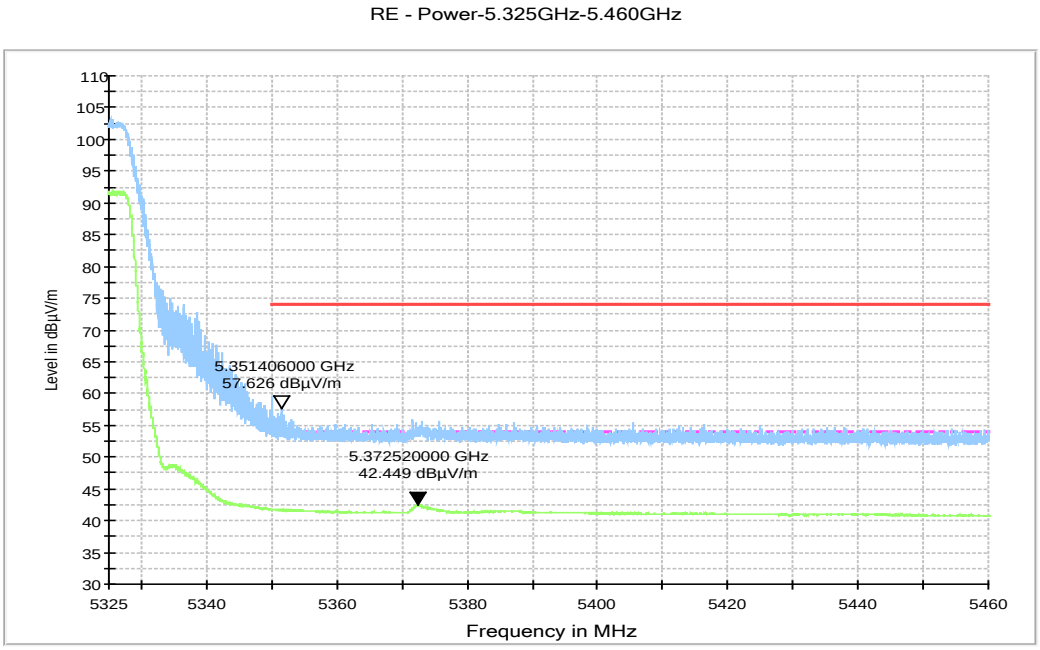

Fig.35 Band Edges (802.11a, 5320MHz)

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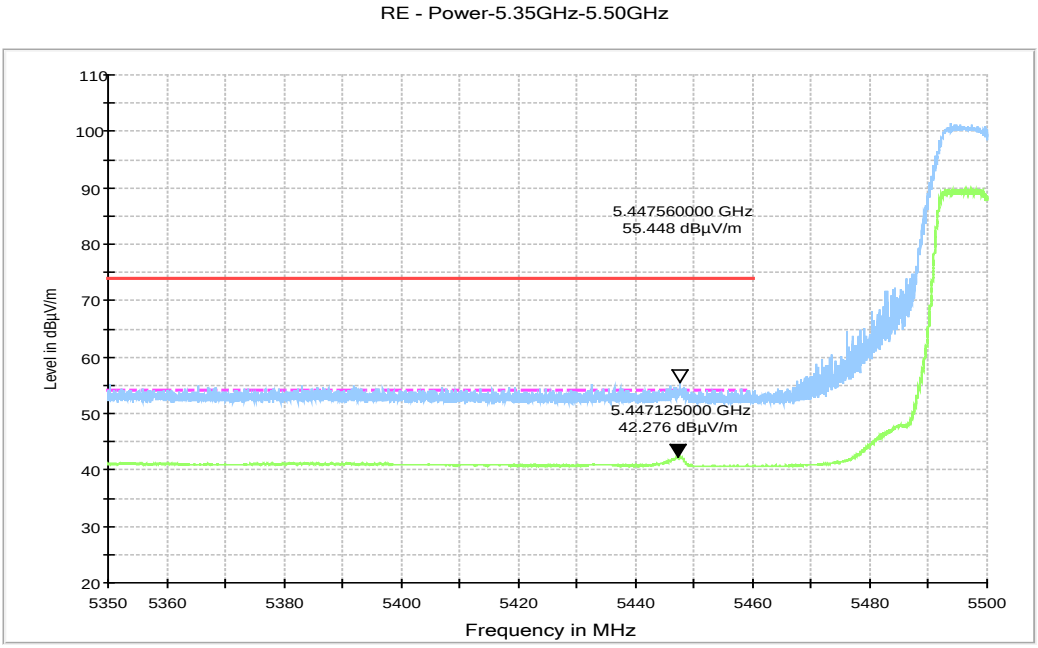

Fig.36 Band Edges (802.11a, 5500MHz)

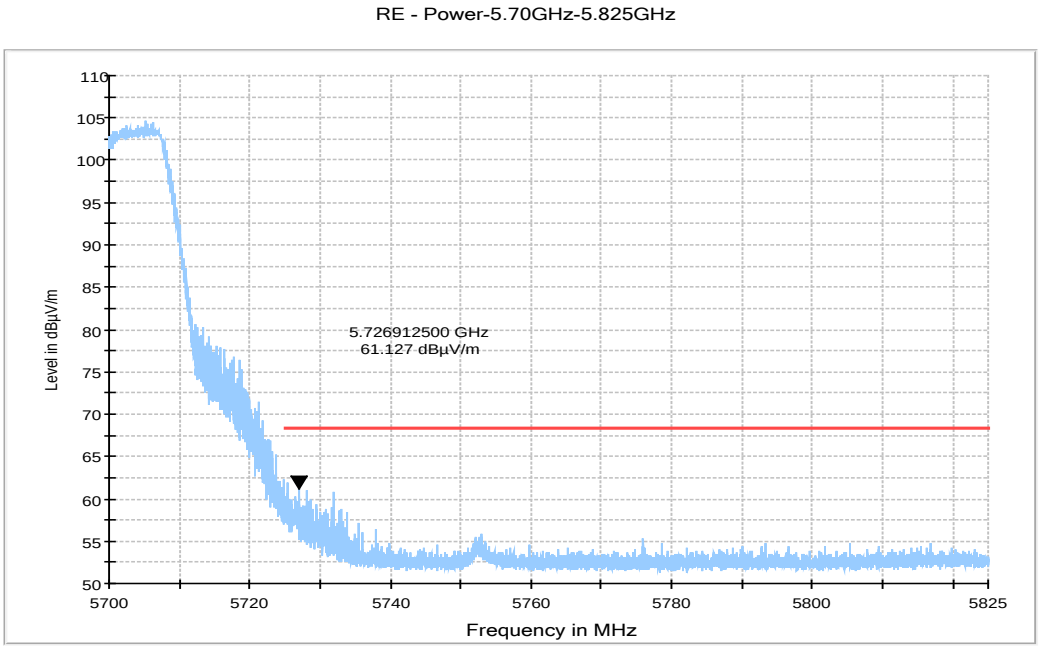

Fig.37 Band Edges (802.11a, 5700MHz)

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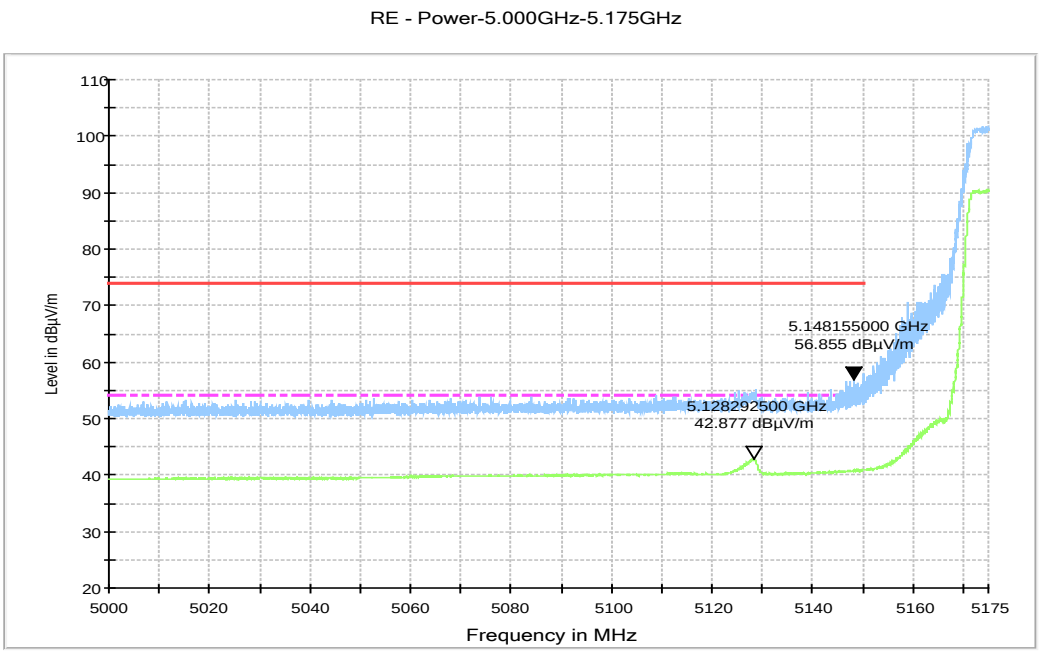

Fig.38 Band Edges (802.11n-HT20, 5180MHz)

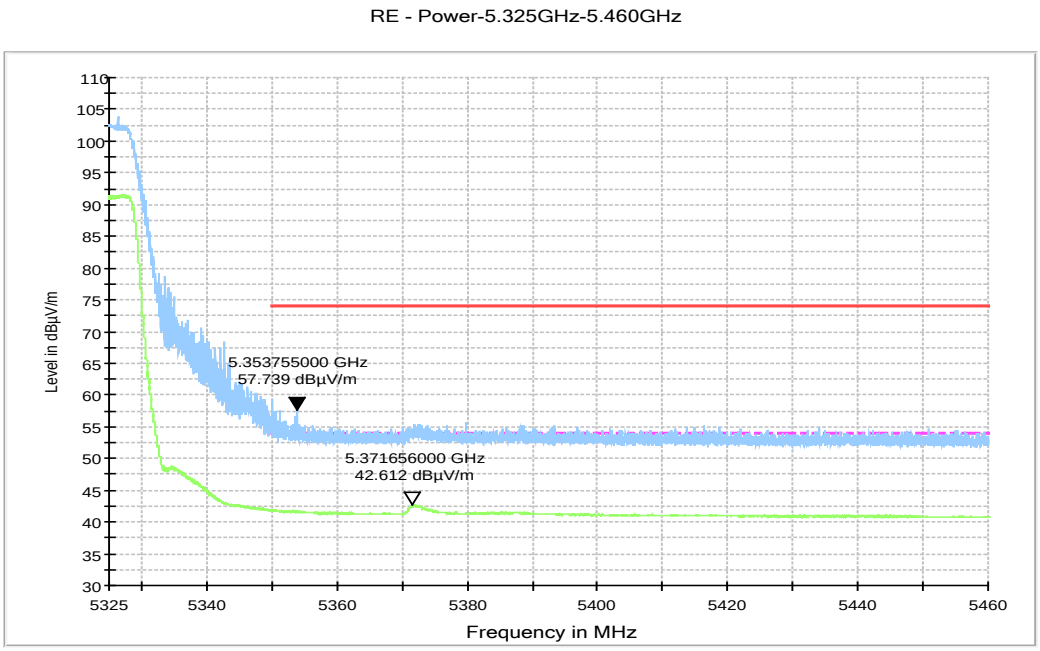

Fig.39 Band Edges (802.11n-HT20, 5320MHz)

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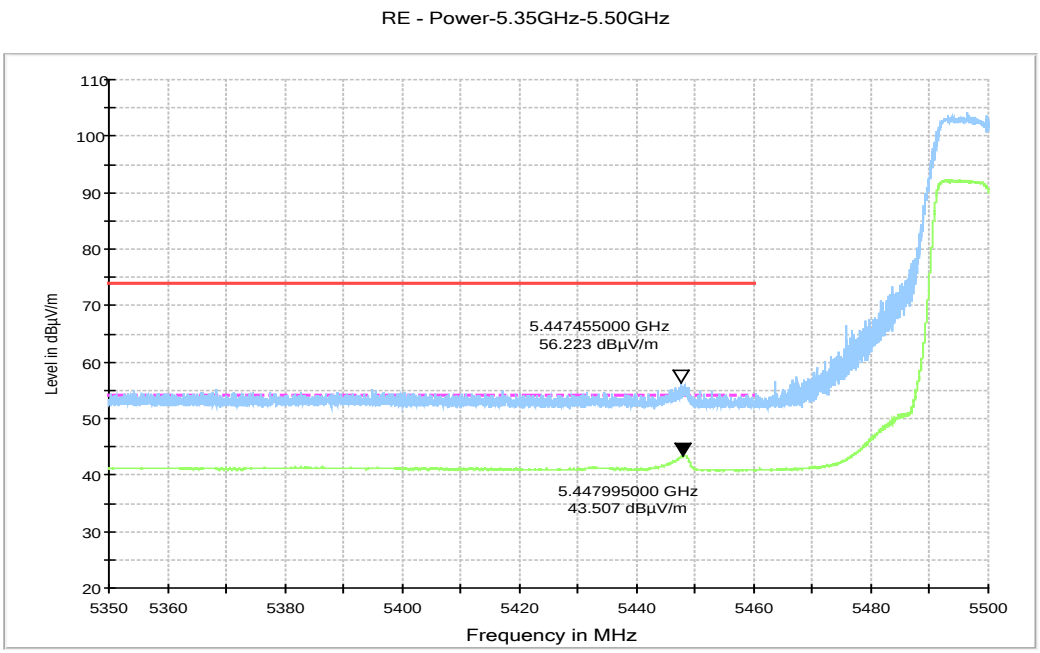

Fig.40 Band Edges (802.11n-HT20, 5500MHz)

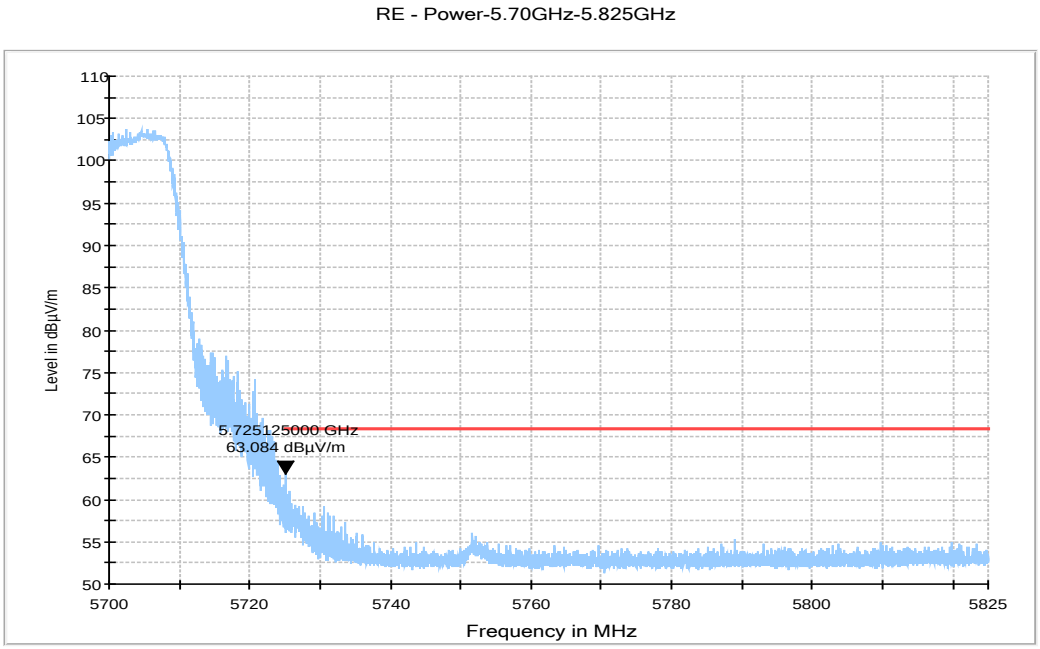

Fig.41 Band Edges (802.11n-HT20, 5700MHz)

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RE - Power-5.000GHz-5.175GHz

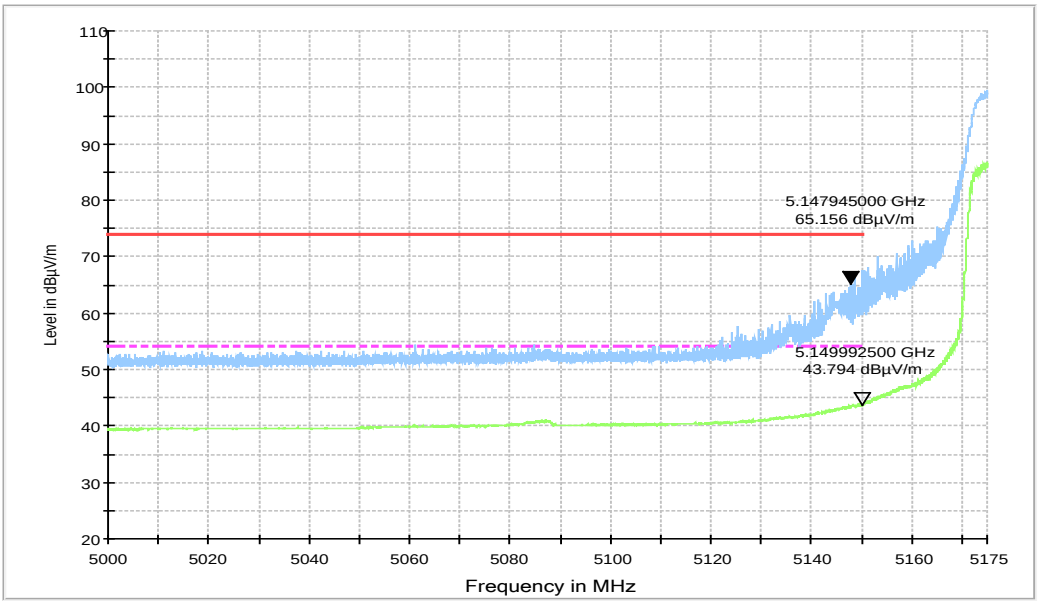

Fig.42 Band Edges (802.11n-HT40, 5190MHz)

RE - Power-5.325GHz-5.460GHz

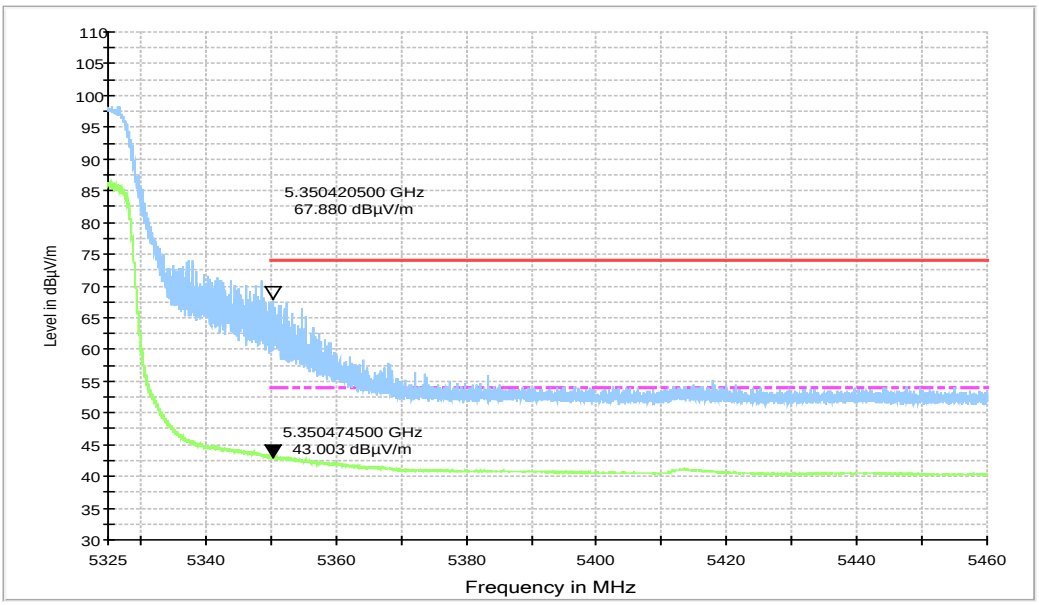

Fig.43 Band Edges (802.11n-HT40, 5310MHz)

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RE - Power-5.35GHz-5.50GHz

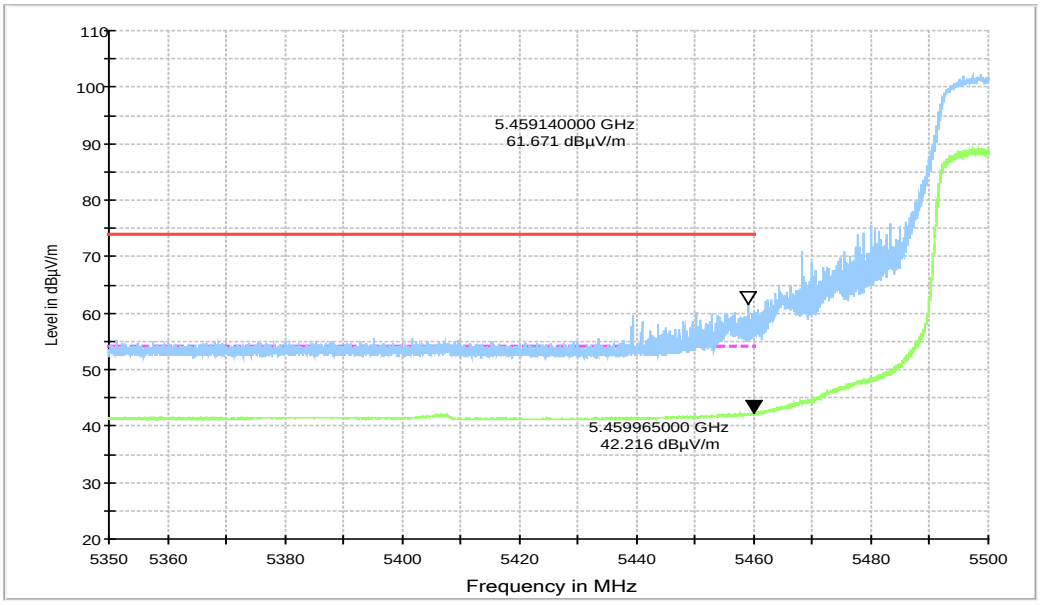

Fig.44 Band Edges (802.11n-HT40, 5510MHz)

RE - Power-5.70GHz-5.825GHz

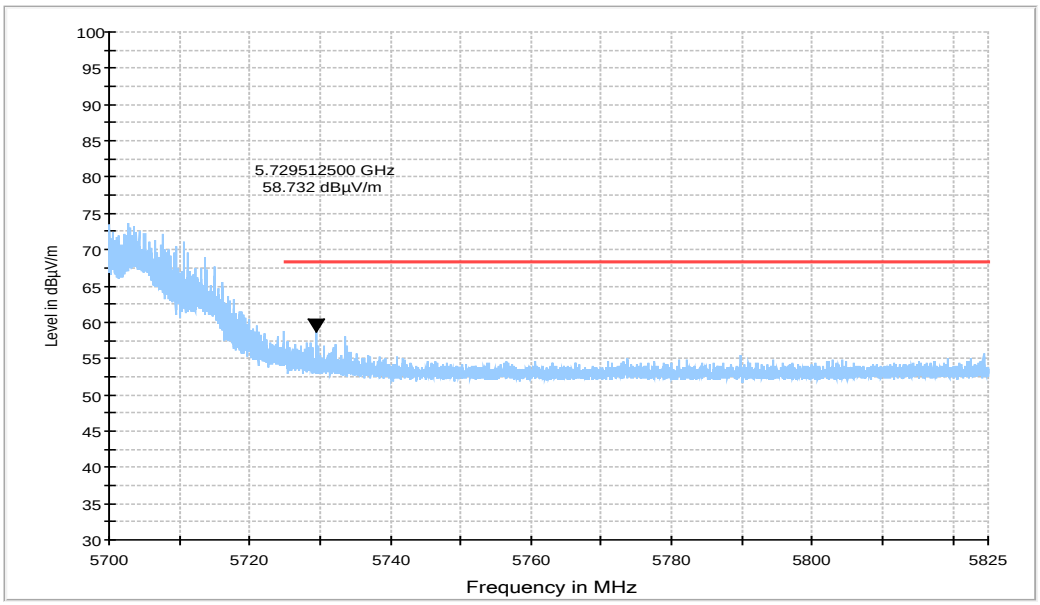

Fig.45 Band Edges (802.11n-HT40, 5670MHz)

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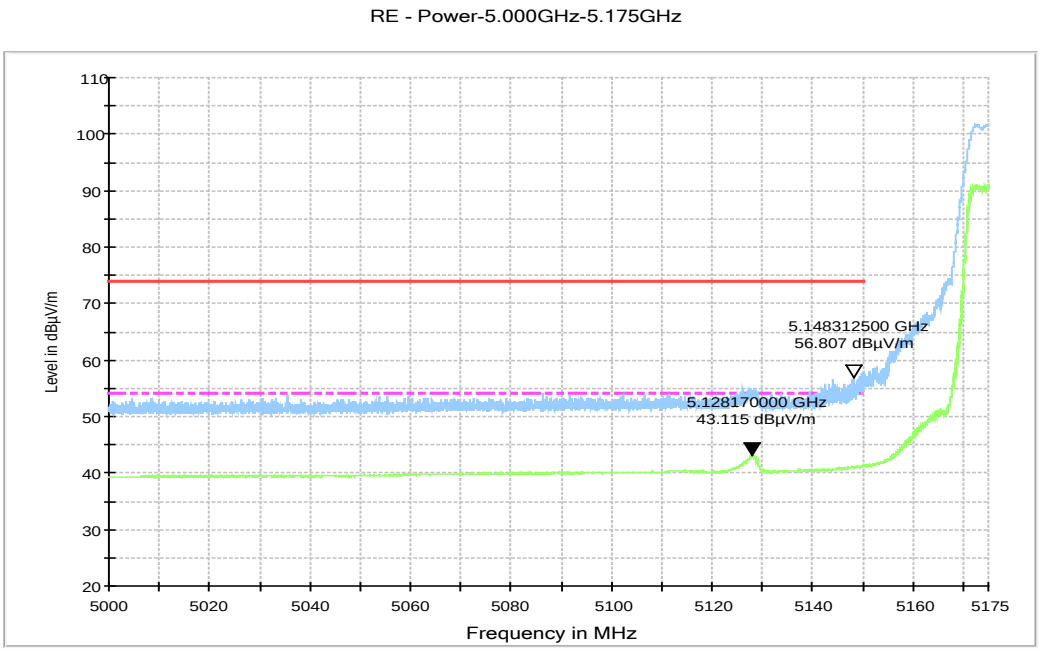

Fig.46 Band Edges (802.11ac-HT20, 5180MHz)

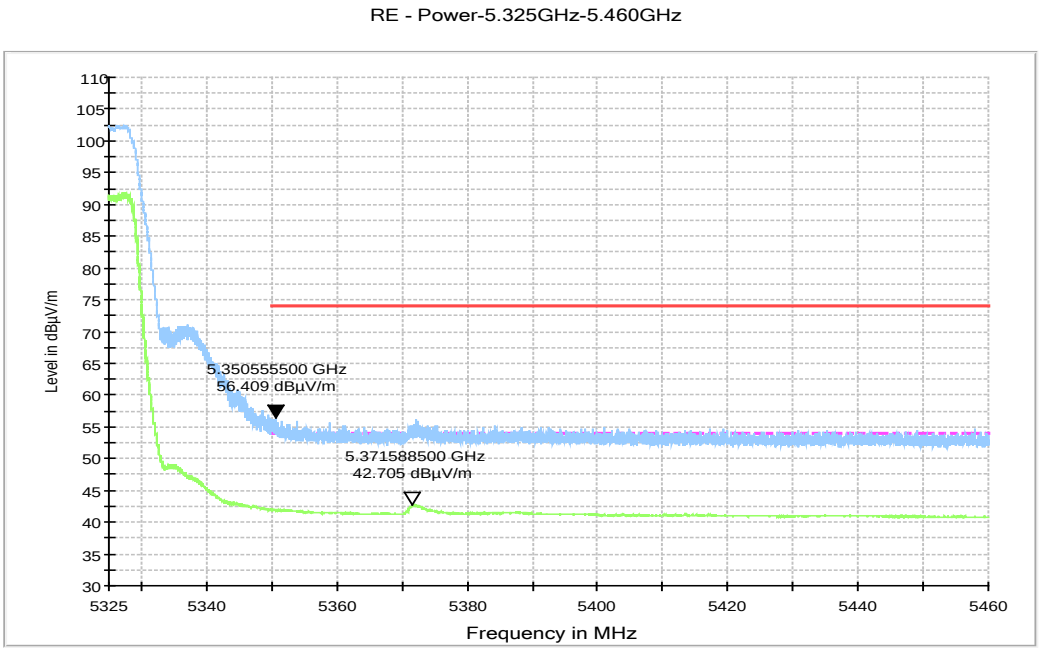

Fig.47 Band Edges (802.11ac-HT20, 5320MHz)

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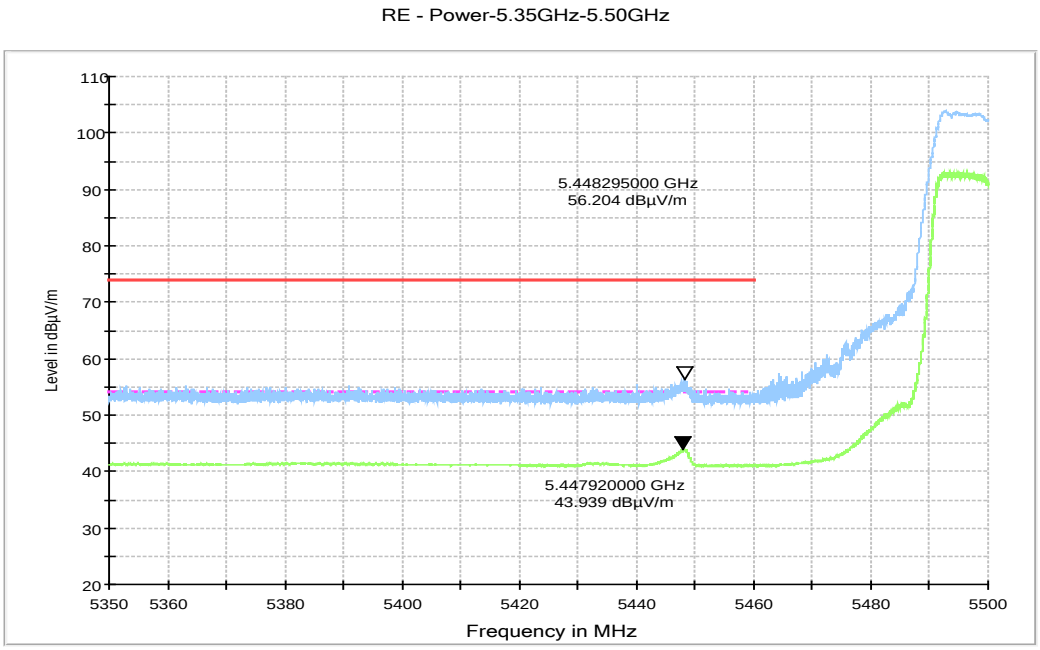

Fig.48 Band Edges (802.11ac-HT20, 5500MHz)

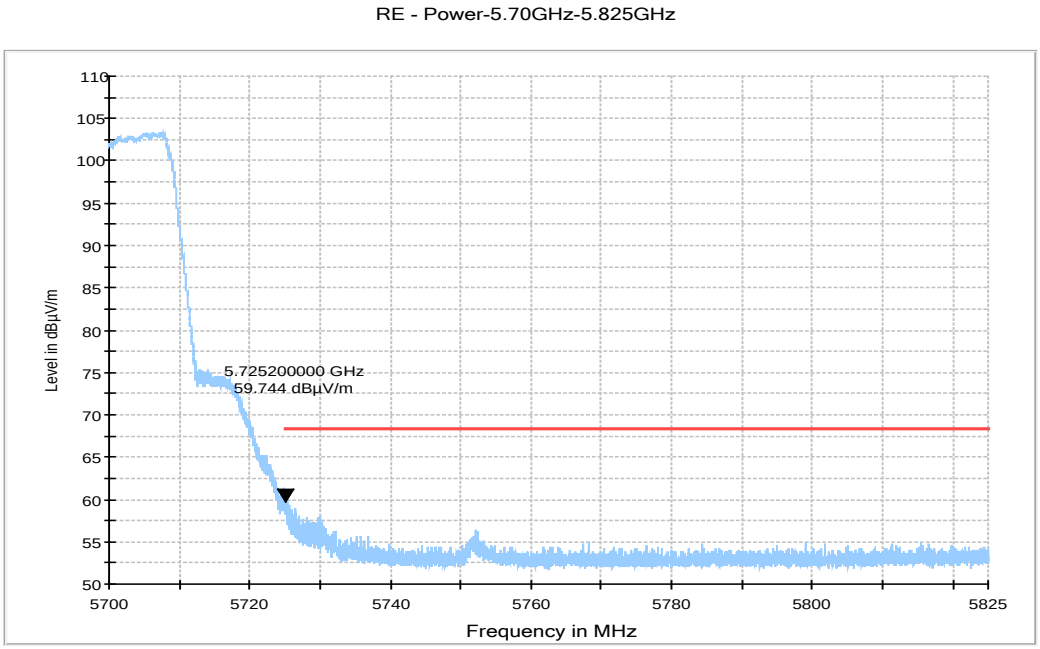

Fig.49 Band Edges (802.11ac-HT20, 5700MHz)

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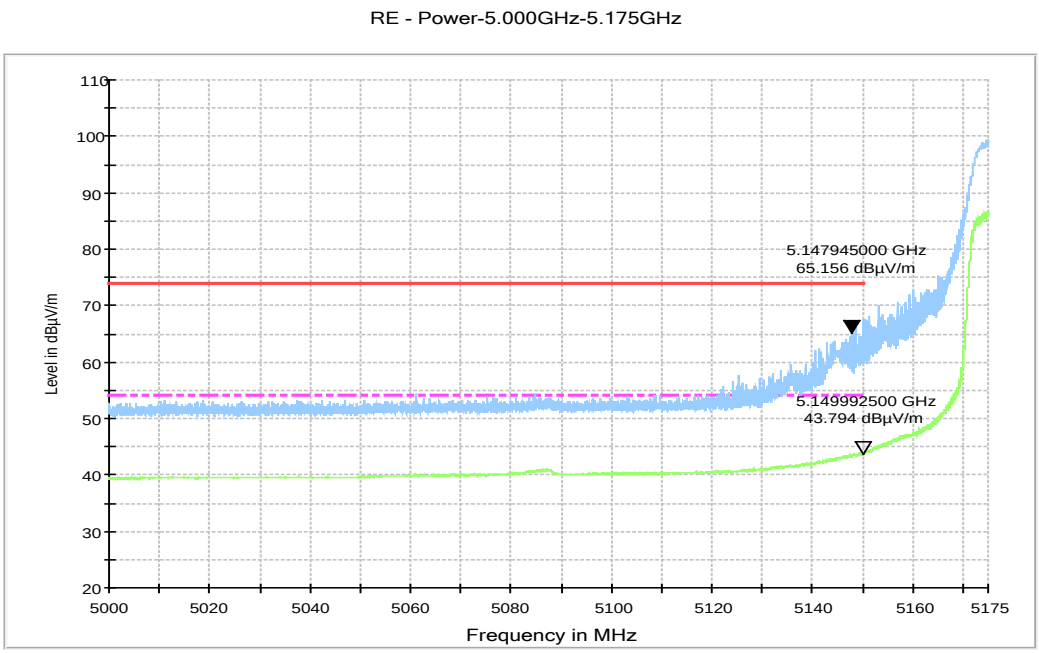

Fig.50 Band Edges (802.11ac-HT40, 5190MHz)

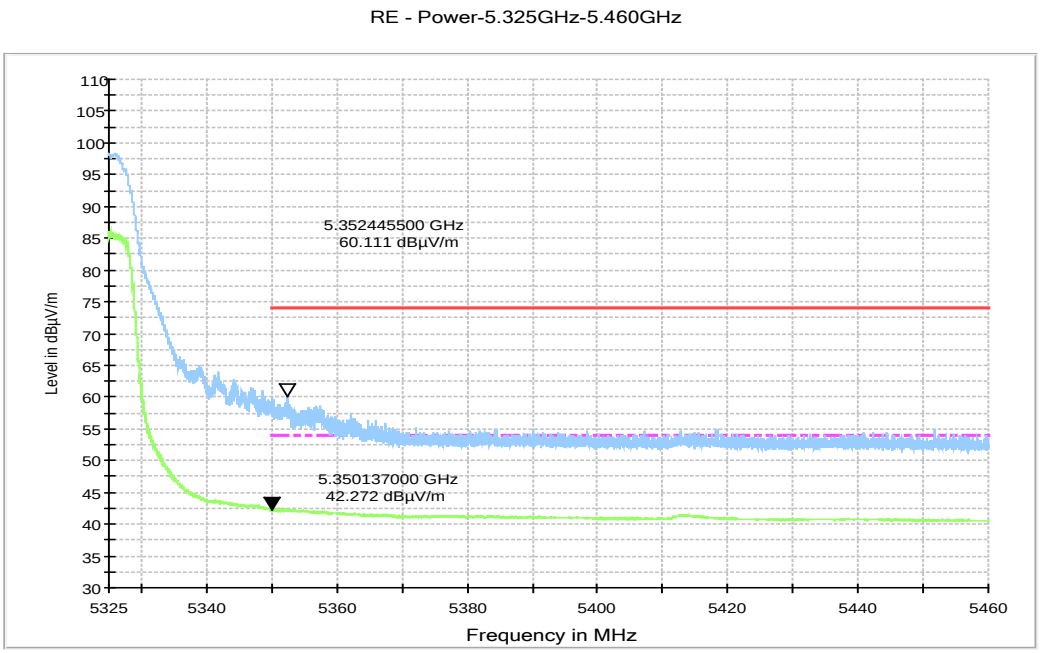

Fig.51 Band Edges (802.11ac-HT40, 5310MHz)

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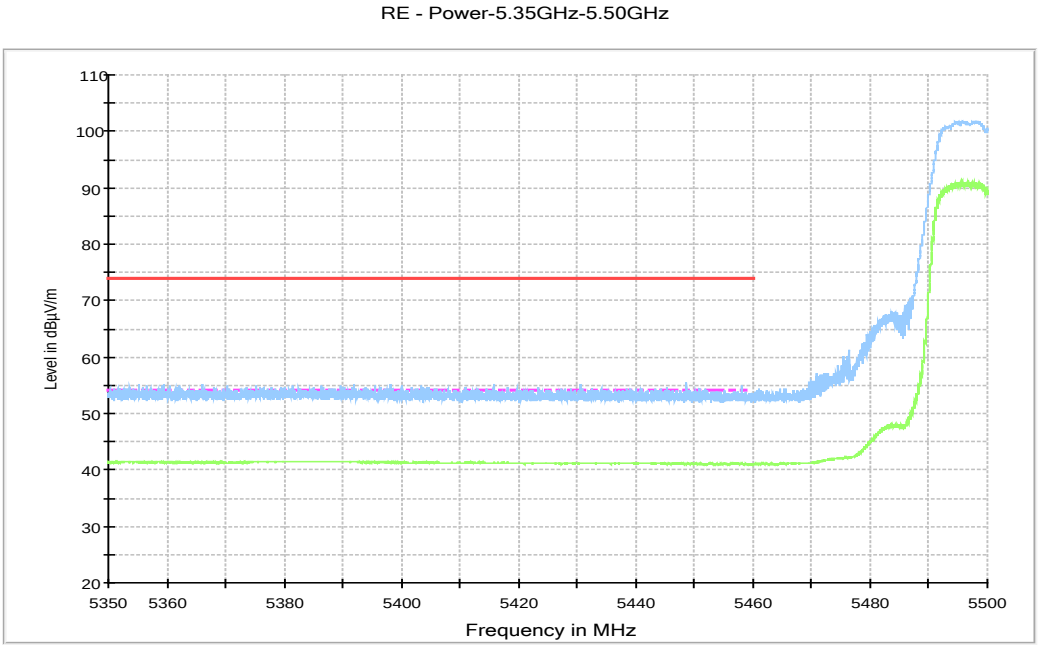

Fig.52 Band Edges (802.11ac-HT40, 5510MHz)

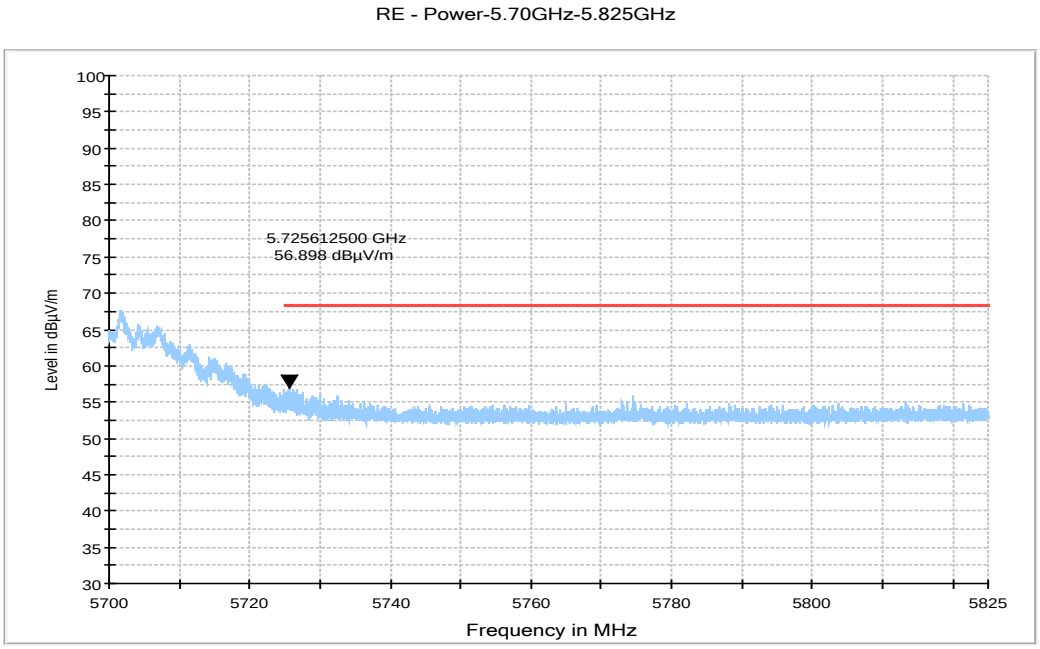

Fig.53 Band Edges (802.11ac-HT40, 5670MHz)

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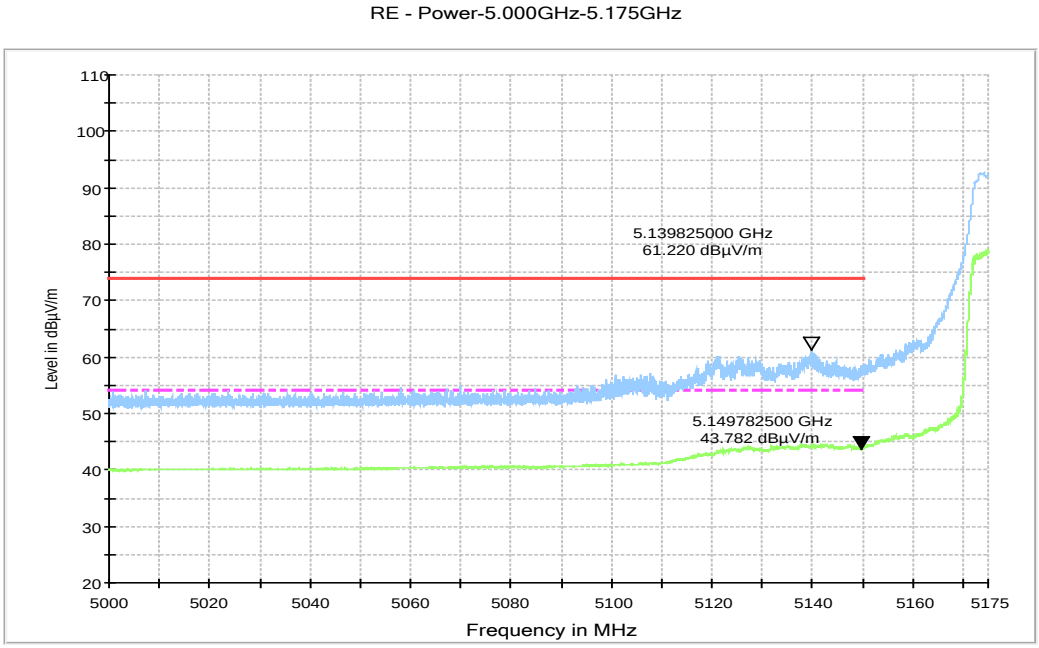

Fig.54 Band Edges (802.11ac-HT80, 5210MHz)

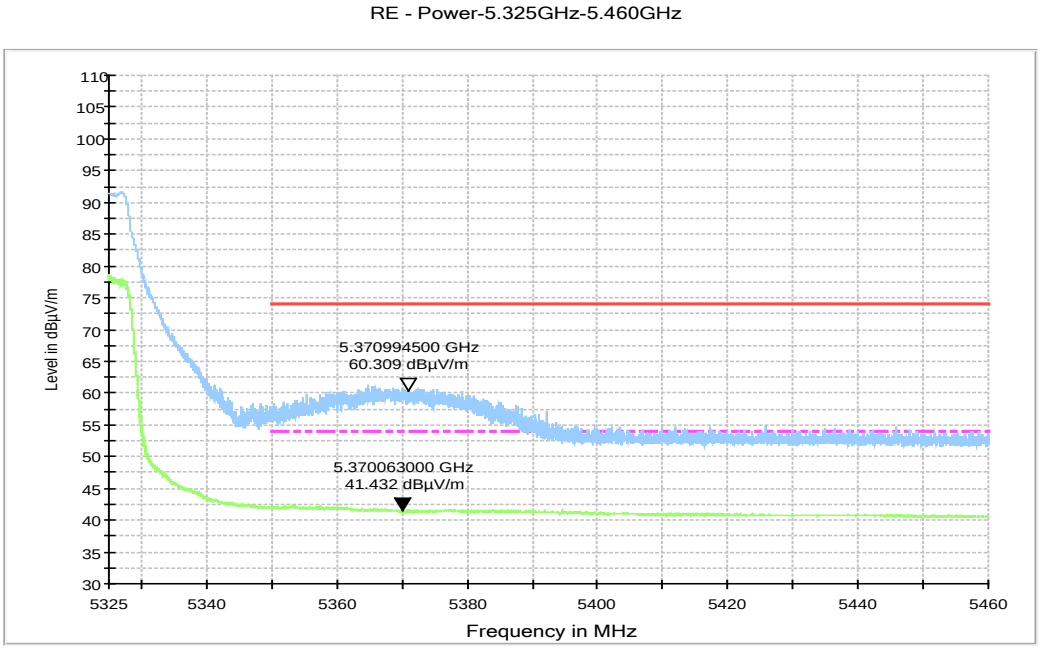

Fig.55 Band Edges (802.11ac-HT80, 5290MHz)

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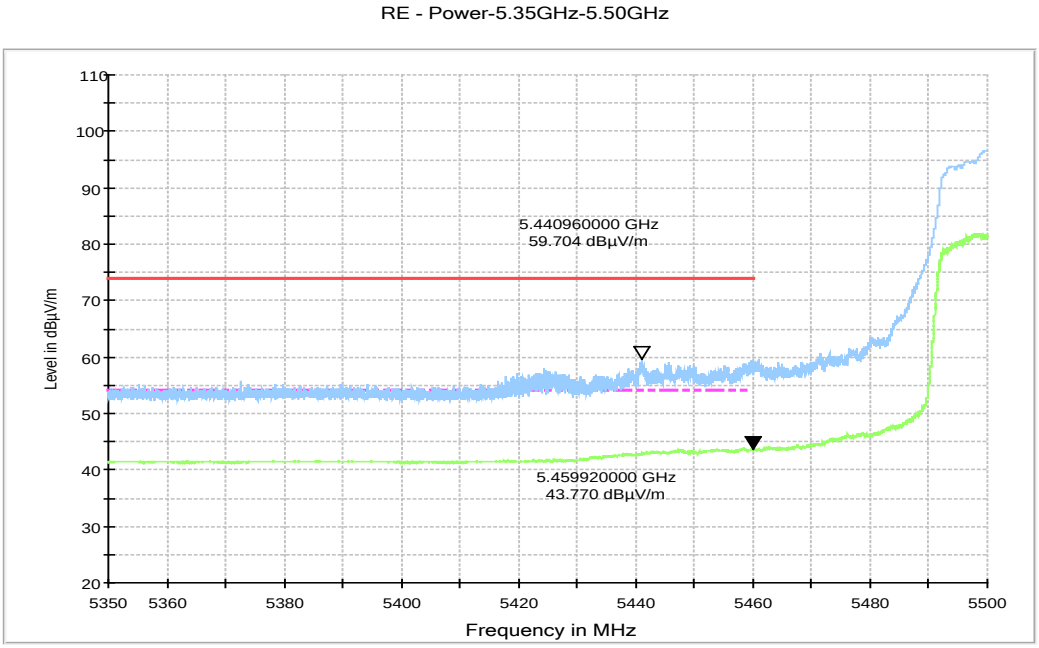

Fig.56 Band Edges (802.11ac-HT80, 5530MHz)

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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:

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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
	100(5500MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	120(5600MHz)	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
	140(5700MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	144(5720MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P

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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
	100(5500MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	120(5600MHz)	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
	140(5700MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	144(5720MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P

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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
	102(5510MHz)	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
	118(5590MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	134(5670MHz)	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
	142(5710MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P

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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
	100(5500MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	120(5600MHz)	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
	140(5700MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	144(5720MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P

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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
	102(5510MHz)	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
	118(5590MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	134(5670MHz)	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
	142(5710MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P

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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
	138(5690MHz)	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:

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

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AVERAGE Results:

802.11a

Channel 36

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5127.100	40.2	-23.3	34.3	29.27	54.0	13.8	H
5127.700	40.4	-23.3	34.3	29.44	54.0	13.6	H
10854.400	30.8	-29.8	37.9	22.65	54.0	23.2	H
15540.400	34.2	-24.5	40.1	18.51	54.0	19.8	H
15971.600	35.0	-23.8	40.7	18.13	54.0	19.0	H
78988.000	37.6	0.0	0.0	37.63	54.0	16.4	H

Channel 40

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5146.900	39.9	-23.3	34.3	28.93	54.0	14.1	H
5350.000	38.1	-22.3	34.3	26.00	54.0	15.9	H
10980.900	30.9	-29.9	38.0	22.78	54.0	23.1	H
15599.800	34.4	-24.5	40.2	18.71	54.0	19.6	H
16058.500	35.4	-23.5	40.8	18.17	54.0	18.6	H
17894.400	37.6	-22.6	41.5	18.65	54.0	16.4	H

Channel 48

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5145.100	37.9	-23.3	34.3	26.92	54.0	16.1	H
5363.800	38.1	-22.3	34.3	26.09	54.0	15.9	H
11021.600	31.4	-29.8	38.0	23.18	54.0	22.6	H
15719.700	34.3	-24.4	40.4	18.32	54.0	19.7	H
17787.700	37.4	-22.4	41.5	18.20	54.0	16.6	H
17912.000	37.7	-22.6	41.5	18.80	54.0	16.3	H

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Channel 52

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5149.600	38.6	-23.3	34.3	27.57	54.0	15.4	H
5358.100	39.1	-22.3	34.3	27.07	54.0	14.9	H
11052.400	32.5	-29.8	38.0	24.32	54.0	21.5	H
15780.200	35.4	-24.2	40.4	19.13	54.0	18.6	H
17778.900	38.2	-22.4	41.5	19.05	54.0	15.8	H
17912.000	38.4	-22.6	41.5	19.57	54.0	15.6	H

Channel 56

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5149.900	38.4	-23.3	34.3	27.43	54.0	15.6	H
5356.900	39.1	-22.3	34.3	27.07	54.0	14.9	H
11011.700	32.6	-29.8	38.0	24.41	54.0	21.4	H
15839.600	35.9	-24.1	40.5	19.41	54.0	18.1	H
17774.500	38.2	-22.4	41.5	19.01	54.0	15.8	H
17903.200	38.5	-22.6	41.5	19.63	54.0	15.5	H

Channel 64

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5350.600	39.7	-22.3	34.3	27.65	54.0	14.3	H
5372.200	39.5	-22.3	34.4	27.48	54.0	14.5	H
10639.900	49.0	-29.3	37.9	40.41	54.0	5.0	H
15959.500	36.3	-23.8	40.7	19.49	54.0	17.7	H
17725.000	38.2	-22.2	41.6	18.90	54.0	15.8	H
17903.200	38.5	-22.6	41.5	19.58	54.0	15.5	H

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Channel 100

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5410.000	38.5	-22.4	34.4	26.54	54.0	15.5	H
5448.000	39.3	-22.7	34.4	27.62	54.0	14.7	H
10999.600	41.9	-29.9	38.0	33.82	54.0	12.1	H
16149.800	36.3	-23.3	40.9	18.65	54.0	17.7	H
17887.800	38.0	-22.6	41.5	19.03	54.0	16.0	H
17978.000	37.9	-22.8	41.5	19.13	54.0	16.1	H

Channel 120

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5397.200	38.6	-22.3	34.4	26.58	54.0	15.4	H
5413.600	38.6	-22.4	34.4	26.63	54.0	15.4	H
11199.800	44.6	-30.4	38.1	36.91	54.0	9.4	H
16149.800	36.3	-23.3	40.9	18.64	54.0	17.7	H
17826.200	37.9	-22.5	41.5	18.81	54.0	16.1	H
17919.700	38.1	-22.7	41.5	19.25	54.0	15.9	H

Channel 140

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5412.000	38.7	-22.4	34.4	26.76	54.0	15.3	H
5441.600	38.8	-22.6	34.4	27.03	54.0	15.2	H
11400.000	46.1	-29.7	38.2	37.64	54.0	7.9	H
17732.700	37.8	-22.3	41.6	18.52	54.0	16.2	H
17835.000	37.9	-22.5	41.5	18.83	54.0	16.1	H
17914.200	38.2	-22.6	41.5	19.35	54.0	15.8	H

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Channel 144

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5414.400	38.7	-22.4	34.4	26.74	54.0	15.3	H
5440.000	38.7	-22.6	34.4	26.97	54.0	15.3	H
11439.600	46.0	-29.5	38.2	37.31	54.0	8.0	H
17879.000	37.9	-22.6	41.5	18.93	54.0	16.1	H
17898.800	38.1	-22.6	41.5	19.20	54.0	15.9	H
17937.300	37.9	-22.7	41.5	19.06	54.0	16.1	H

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Channel 36

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5128.000	41.1	-23.3	34.3	30.13	54.0	12.9	H
5128.300	41.0	-23.3	34.3	30.07	54.0	13.0	H
11156.900	30.8	-30.5	38.1	23.25	54.0	23.2	H
15540.400	34.2	-24.5	40.1	18.57	54.0	19.8	H
17767.900	37.4	-22.3	41.5	18.15	54.0	16.6	H
17904.300	37.7	-22.6	41.5	18.84	54.0	16.3	H

Channel 40

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5146.600	38.2	-23.3	34.3	27.19	54.0	15.8	H
5358.100	38.4	-22.3	34.3	26.30	54.0	15.6	H
11029.300	31.5	-29.8	38.0	23.28	54.0	22.5	H
15599.800	34.6	-24.5	40.2	18.92	54.0	19.4	H
17767.900	37.4	-22.3	41.5	18.20	54.0	16.6	H
17936.200	37.6	-22.7	41.5	18.79	54.0	16.4	H

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Channel 48

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5149.600	37.8	-23.3	34.3	26.77	54.0	16.2	H
5353.900	38.4	-22.3	34.3	26.34	54.0	15.6	H
11044.700	31.5	-29.8	38.0	23.27	54.0	22.5	H
15719.700	34.5	-24.4	40.4	18.49	54.0	19.5	H
16154.200	35.8	-23.3	40.9	18.14	54.0	18.2	H
17750.300	37.5	-22.3	41.5	18.27	54.0	16.5	H

Channel 52

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5149.600	38.6	-23.3	34.3	27.64	54.0	15.4	H
5352.700	39.1	-22.3	34.3	27.10	54.0	14.9	H
11336.200	32.8	-30.0	38.1	24.69	54.0	21.2	H
15780.200	35.3	-24.2	40.4	19.08	54.0	18.7	H
17770.100	38.2	-22.3	41.5	19.00	54.0	15.8	H
17912.000	38.5	-22.6	41.5	19.58	54.0	15.5	H

Channel 56

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5149.300	38.7	-23.3	34.3	27.67	54.0	15.3	H
5355.700	39.1	-22.3	34.3	27.07	54.0	14.9	H
11825.700	33.2	-29.3	38.5	23.91	54.0	20.8	H
15839.600	35.8	-24.1	40.5	19.38	54.0	18.2	H
17706.300	38.3	-22.2	41.6	18.97	54.0	15.7	H
17915.300	38.5	-22.6	41.5	19.59	54.0	15.5	H

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Channel 64

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5352.700	39.5	-22.3	34.3	27.44	54.0	14.5	H
5371.300	40.1	-22.3	34.4	28.06	54.0	13.9	H
10639.900	49.0	-29.3	37.9	40.44	54.0	5.0	H
15959.500	36.0	-23.8	40.7	19.17	54.0	18.0	H
17750.300	38.3	-22.3	41.5	19.09	54.0	15.7	H
17903.200	38.5	-22.6	41.5	19.56	54.0	15.5	H

Channel 100

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5432.400	39.2	-22.6	34.4	27.37	54.0	14.8	H
5448.000	41.9	-22.7	34.4	30.16	54.0	12.1	H
10999.600	41.9	-29.9	38.0	33.76	54.0	12.1	H
17737.100	37.9	-22.3	41.6	18.64	54.0	16.1	H
17759.100	37.7	-22.3	41.5	18.50	54.0	16.3	H
17832.800	37.9	-22.5	41.5	18.82	54.0	16.1	H

Channel 120

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5404.800	39.0	-22.4	34.4	26.96	54.0	15.0	H
5447.600	39.0	-22.7	34.4	27.26	54.0	15.0	H
11199.800	44.7	-30.4	38.1	37.02	54.0	9.3	H
17731.600	37.9	-22.3	41.6	18.55	54.0	16.1	H
17825.100	37.8	-22.5	41.5	18.76	54.0	16.2	H
17902.100	38.1	-22.6	41.5	19.23	54.0	15.9	H

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Channel 140

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5384.000	39.1	-22.3	34.4	27.03	54.0	14.9	H
5440.000	38.9	-22.6	34.4	27.18	54.0	15.1	H
11400.000	46.0	-29.7	38.2	37.59	54.0	8.0	H
17876.800	37.8	-22.6	41.5	18.83	54.0	16.2	H
17894.400	38.0	-22.6	41.5	19.11	54.0	16.0	H
17929.600	38.1	-22.7	41.5	19.26	54.0	15.9	H

Channel 144

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5384.000	39.2	-22.3	34.4	27.11	54.0	14.8	H
5398.400	39.0	-22.3	34.4	26.90	54.0	15.0	H
11439.600	46.0	-29.5	38.2	37.29	54.0	8.0	H
17733.800	37.9	-22.3	41.6	18.58	54.0	16.1	H
17829.500	37.8	-22.5	41.5	18.78	54.0	16.2	H
17883.400	37.9	-22.6	41.5	18.98	54.0	16.1	H

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Channel 38

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5149.600	41.6	-23.3	34.3	30.60	54.0	12.4	H
5149.900	41.7	-23.3	34.3	30.68	54.0	12.3	H
11020.500	32.5	-29.8	38.0	24.29	54.0	21.5	H
15570.100	35.3	-24.5	40.2	19.60	54.0	18.7	H
17752.500	38.1	-22.3	41.5	18.87	54.0	15.9	H
17912.000	38.3	-22.6	41.5	19.45	54.0	15.7	H

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Channel 46

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5107.000	38.8	-23.4	34.2	27.92	54.0	15.2	H
5355.100	38.6	-22.3	34.3	26.57	54.0	15.4	H
11017.200	32.5	-29.8	38.0	24.30	54.0	21.5	H
15690.000	35.4	-24.4	40.3	19.54	54.0	18.6	H
17759.100	38.1	-22.3	41.5	18.85	54.0	15.9	H
17915.300	38.4	-22.6	41.5	19.58	54.0	15.6	H

Channel 54

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5141.200	38.2	-23.3	34.3	27.27	54.0	15.8	H
5356.400	38.8	-22.3	34.3	26.70	54.0	15.2	H
11035.900	31.4	-29.8	38.0	23.18	54.0	22.6	H
15809.900	35.3	-24.1	40.5	18.90	54.0	18.7	H
17836.100	37.9	-22.5	41.5	18.83	54.0	16.1	H
17938.400	38.0	-22.7	41.5	19.15	54.0	16.0	H

Channel 62

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5128.400	38.1	-23.3	34.3	27.18	54.0	15.9	H
5413.600	39.1	-22.4	34.4	27.15	54.0	14.9	H
10620.100	47.0	-29.2	37.8	38.35	54.0	7.0	H
15929.800	35.4	-23.9	40.6	18.69	54.0	18.6	H
17827.300	37.8	-22.5	41.5	18.72	54.0	16.2	H
17928.500	38.1	-22.7	41.5	19.24	54.0	15.9	H

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Channel 102

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5456.000	40.0	-22.7	34.4	28.34	54.0	14.0	H
5459.200	40.1	-22.7	34.4	28.42	54.0	13.9	H
11019.400	43.6	-29.8	38.0	35.38	54.0	10.4	H
16050.800	35.5	-23.5	40.8	18.28	54.0	18.5	H
17830.600	37.6	-22.5	41.5	18.55	54.0	16.4	H
17892.200	37.8	-22.6	41.5	18.84	54.0	16.2	H

Channel 118

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5391.200	39.2	-22.3	34.4	27.09	54.0	14.8	H
5441.200	39.0	-22.6	34.4	27.26	54.0	15.0	H
11180.000	40.7	-30.4	38.1	33.11	54.0	13.3	H
17831.700	37.5	-22.5	41.5	18.44	54.0	16.5	H
17903.200	37.8	-22.6	41.5	18.91	54.0	16.2	H
17930.700	37.7	-22.7	41.5	18.87	54.0	16.3	H

Channel 134

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5358.000	39.2	-22.3	34.3	27.15	54.0	14.8	H
5388.000	39.2	-22.3	34.4	27.14	54.0	14.8	H
11340.600	35.9	-30.0	38.1	27.83	54.0	18.1	H
17737.100	37.6	-22.3	41.6	18.33	54.0	16.4	H
17827.300	37.7	-22.5	41.5	18.61	54.0	16.3	H
17914.200	37.9	-22.6	41.5	19.04	54.0	16.1	H

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Channel 142

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5375.200	39.2	-22.3	34.4	27.09	54.0	14.8	H
5440.800	39.0	-22.6	34.4	27.30	54.0	15.0	H
11419.800	34.0	-29.6	38.2	25.40	54.0	20.0	H
17780.000	37.5	-22.4	41.5	18.27	54.0	16.5	H
17886.700	37.7	-22.6	41.5	18.77	54.0	16.3	H
17917.500	37.9	-22.7	41.5	19.03	54.0	16.1	H

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Channel 36

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5128.000	41.4	-23.3	34.3	30.49	54.0	12.6	H
5128.300	41.3	-23.3	34.3	30.43	54.0	12.7	H
11018.300	32.4	-29.8	38.0	24.26	54.0	21.6	H
15540.400	35.0	-24.5	40.1	19.37	54.0	19.0	H
17742.600	38.2	-22.3	41.6	18.94	54.0	15.8	H
17915.300	38.3	-22.6	41.5	19.47	54.0	15.7	H

Channel 40

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5148.100	40.6	-23.3	34.3	29.63	54.0	13.4	H
5358.100	38.5	-22.3	34.3	26.48	54.0	15.5	H
11012.800	32.3	-29.8	38.0	24.15	54.0	21.7	H
15599.800	35.4	-24.5	40.2	19.69	54.0	18.6	H
17775.600	38.0	-22.4	41.5	18.84	54.0	16.0	H
17912.000	38.3	-22.6	41.5	19.45	54.0	15.7	H

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Channel 48

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5137.900	38.1	-23.3	34.3	27.15	54.0	15.9	H
5354.500	38.5	-22.3	34.3	26.48	54.0	15.5	H
11022.700	32.5	-29.8	38.0	24.29	54.0	21.5	H
15719.700	35.0	-24.4	40.4	19.00	54.0	19.0	H
17743.700	38.2	-22.3	41.6	18.95	54.0	15.8	H
17907.600	38.3	-22.6	41.5	19.43	54.0	15.7	H

Channel 52

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5145.400	37.3	-23.3	34.3	26.30	54.0	16.7	H
5355.700	38.0	-22.3	34.3	25.93	54.0	16.0	H
11018.300	32.6	-29.8	38.0	24.39	54.0	21.4	H
15780.200	35.3	-24.2	40.4	19.07	54.0	18.7	H
17773.400	38.2	-22.3	41.5	19.05	54.0	15.8	H
17903.200	38.5	-22.6	41.5	19.58	54.0	15.5	H

Channel 56

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5145.100	37.1	-23.3	34.3	26.12	54.0	16.9	H
5353.900	38.2	-22.3	34.3	26.15	54.0	15.8	H
11329.600	32.7	-30.1	38.1	24.61	54.0	21.3	H
15839.600	35.9	-24.1	40.5	19.47	54.0	18.1	H
17754.700	38.3	-22.3	41.5	19.07	54.0	15.7	H
17897.700	38.5	-22.6	41.5	19.57	54.0	15.5	H

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Channel 64

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5351.200	39.7	-22.3	34.3	27.63	54.0	14.3	H
5371.600	40.6	-22.3	34.4	28.53	54.0	13.4	H
10639.900	49.5	-29.3	37.9	40.97	54.0	4.5	H
15959.500	36.0	-23.8	40.7	19.15	54.0	18.0	H
17750.300	38.3	-22.3	41.5	19.07	54.0	15.7	H
17897.700	38.6	-22.6	41.5	19.67	54.0	15.4	H

Channel 100

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5432.800	39.4	-22.6	34.4	27.56	54.0	14.6	H
5448.400	41.9	-22.7	34.4	30.19	54.0	12.1	H
10999.600	42.0	-29.9	38.0	33.91	54.0	12.0	H
16088.200	36.1	-23.4	40.8	18.66	54.0	17.9	H
17707.400	38.0	-22.2	41.6	18.66	54.0	16.0	H
17833.900	37.9	-22.5	41.5	18.87	54.0	16.1	H

Channel 120

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5402.800	39.0	-22.3	34.4	27.01	54.0	15.0	H
5449.200	39.0	-22.7	34.4	27.29	54.0	15.0	H
11199.800	44.7	-30.4	38.1	37.04	54.0	9.3	H
16123.400	36.1	-23.3	40.9	18.53	54.0	17.9	H
17836.100	37.9	-22.5	41.5	18.81	54.0	16.1	H
17903.200	38.2	-22.6	41.5	19.26	54.0	15.8	H

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Channel 140

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5385.600	39.2	-22.3	34.4	27.11	54.0	14.8	H
5436.400	39.0	-22.6	34.4	27.21	54.0	15.0	H
11400.000	46.1	-29.7	38.2	37.70	54.0	7.9	H
17737.100	37.9	-22.3	41.6	18.64	54.0	16.1	H
17826.200	37.9	-22.5	41.5	18.84	54.0	16.1	H
17915.300	38.2	-22.6	41.5	19.34	54.0	15.8	H

Channel 144

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5380.400	39.1	-22.3	34.4	27.06	54.0	14.9	H
5440.800	39.0	-22.6	34.4	27.24	54.0	15.0	H
11440.700	33.9	-29.5	38.2	25.14	54.0	20.1	H
17738.200	37.5	-22.3	41.6	18.24	54.0	16.5	H
17838.300	37.4	-22.5	41.5	18.40	54.0	16.6	H
17917.500	38.0	-22.7	41.5	19.10	54.0	16.0	H

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Channel 38

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5148.400	40.9	-23.3	34.3	29.92	54.0	13.1	H
5149.900	41.2	-23.3	34.3	30.20	54.0	12.8	H
11012.800	32.4	-29.8	38.0	24.29	54.0	21.6	H
15570.100	35.3	-24.5	40.2	19.66	54.0	18.7	H
17773.400	38.1	-22.3	41.5	18.89	54.0	15.9	H
17908.700	38.5	-22.6	41.5	19.60	54.0	15.5	H

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Channel 46

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5106.700	38.7	-23.4	34.2	27.92	54.0	15.3	H
5353.300	38.7	-22.3	34.3	26.60	54.0	15.3	H
11019.400	32.5	-29.8	38.0	24.31	54.0	21.5	H
15690.000	35.4	-24.4	40.3	19.51	54.0	18.6	H
17756.900	38.2	-22.3	41.5	18.98	54.0	15.8	H
17912.000	38.4	-22.6	41.5	19.55	54.0	15.6	H

Channel 54

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5145.200	38.3	-23.3	34.3	27.30	54.0	15.7	H
5372.800	39.3	-22.3	34.4	27.20	54.0	14.7	H
10833.500	31.3	-29.8	37.9	23.19	54.0	22.7	H
15809.900	35.3	-24.1	40.5	18.95	54.0	18.7	H
17836.100	37.9	-22.5	41.5	18.82	54.0	16.1	H
17928.500	38.2	-22.7	41.5	19.36	54.0	15.8	H

Channel 62

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5143.200	38.2	-23.3	34.3	27.24	54.0	15.8	H
5412.400	39.0	-22.4	34.4	27.03	54.0	15.0	H
10620.100	47.2	-29.2	37.8	38.52	54.0	6.8	H
15929.800	35.5	-23.9	40.6	18.73	54.0	18.5	H
17832.800	38.0	-22.5	41.5	18.94	54.0	16.0	H
17921.900	38.2	-22.7	41.5	19.35	54.0	15.8	H

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Channel 102

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5402.000	39.3	-22.3	34.4	27.28	54.0	14.7	H
5407.600	39.5	-22.4	34.4	27.55	54.0	14.5	H
11019.400	43.7	-29.8	38.0	35.49	54.0	10.3	H
16080.500	35.8	-23.5	40.8	18.46	54.0	18.2	H
17822.900	37.6	-22.5	41.5	18.53	54.0	16.4	H
17938.400	37.8	-22.7	41.5	19.02	54.0	16.2	H

Channel 118

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5386.400	39.3	-22.3	34.4	27.22	54.0	14.7	H
5426.800	38.9	-22.5	34.4	27.03	54.0	15.1	H
11180.000	41.0	-30.4	38.1	33.37	54.0	13.0	H
17828.400	37.7	-22.5	41.5	18.66	54.0	16.3	H
17908.700	38.1	-22.6	41.5	19.20	54.0	15.9	H
17953.800	37.7	-22.7	41.5	18.96	54.0	16.3	H

Channel 134

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5358.400	39.2	-22.3	34.3	27.11	54.0	14.8	H
5389.600	39.1	-22.3	34.4	27.04	54.0	14.9	H
11339.500	36.4	-30.0	38.1	28.31	54.0	17.6	H
17772.300	37.5	-22.3	41.5	18.31	54.0	16.5	H
17835.000	37.8	-22.5	41.5	18.76	54.0	16.2	H
17913.100	38.1	-22.6	41.5	19.23	54.0	15.9	H

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Channel 142

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5360.000	39.2	-22.3	34.3	27.10	54.0	14.8	H
5389.600	39.2	-22.3	34.4	27.17	54.0	14.8	H
11419.800	34.3	-29.6	38.2	25.69	54.0	19.7	H
17829.500	37.7	-22.5	41.5	18.67	54.0	16.3	H
17906.500	38.1	-22.6	41.5	19.20	54.0	15.9	H
17945.000	37.9	-22.7	41.5	19.09	54.0	16.1	H

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Channel 42

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5142.800	38.9	-33.3	34.3	37.88	54.0	15.1	H
5148.800	39.3	-33.3	34.3	38.24	54.0	14.7	H
11018.300	32.0	-29.8	37.9	23.90	54.0	22.0	H
15629.500	35.2	-24.5	40.4	19.40	54.0	18.8	H
17831.700	38.1	-22.5	41.3	19.31	54.0	15.9	H
17896.600	38.2	-22.6	41.3	19.58	54.0	15.8	H

Channel 58

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5357.800	39.8	-32.3	34.5	37.60	54.0	14.2	H
5357.600	39.8	-32.3	34.5	37.64	54.0	14.2	H
10610.200	31.1	-29.2	37.7	22.58	54.0	22.9	H
15870.400	35.4	-24.0	40.6	18.77	54.0	18.6	H
17828.400	38.0	-22.5	41.3	19.19	54.0	16.0	H
17919.700	38.3	-22.7	41.3	19.63	54.0	15.7	H

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Channel 106

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5453.600	41.2	-32.7	34.6	39.38	54.0	12.8	H
5458.000	41.6	-32.7	34.6	39.69	54.0	12.4	H
11060.100	42.8	-29.9	38.0	34.73	54.0	11.2	H
16142.100	36.4	-23.3	41.0	18.74	54.0	17.6	H
17835.000	38.2	-22.5	41.3	19.38	54.0	15.8	H
17981.300	38.0	-22.8	41.3	19.52	54.0	16.0	H

Channel 138

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5367.200	39.3	-32.3	34.5	37.09	54.0	14.7	H
5386.800	39.3	-32.3	34.5	37.08	54.0	14.7	H
16940.700	37.1	-23.0	41.7	18.45	54.0	16.9	H
17756.900	37.4	-22.3	41.3	18.49	54.0	16.6	H
17898.800	37.7	-22.6	41.3	19.05	54.0	16.3	H
17926.300	37.8	-22.7	41.3	19.17	54.0	16.2	H

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Channel 36

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5147.683	57.8	-23.3	34.3	46.79	74.0	16.2	H
5148.680	58.2	-23.3	34.3	47.25	74.0	15.8	H
10359.950	50.8	-29.7	37.6	42.84	68.3	17.5	V
15539.850	51.7	-24.5	40.1	36.07	68.3	16.6	H
16935.200	56.8	-23.0	42.1	37.74	68.3	11.5	V
17516.550	56.3	-22.8	41.6	37.49	68.3	12.0	H

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Channel 40

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5148.000	53.7	-23.3	34.3	42.68	68.3	14.6	H
5367.400	53.7	-22.3	34.3	41.67	68.3	14.6	H
10400.100	50.1	-29.3	37.7	41.76	68.3	18.2	V
15599.800	50.6	-24.5	40.2	34.91	68.3	17.7	H
16747.650	57.0	-23.1	41.8	38.16	68.3	11.4	V
17052.900	56.8	-23.0	42.1	37.64	68.3	11.6	H

Channel 48

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5116.400	53.0	-23.4	34.2	42.08	74.0	21.0	H
5367.400	53.2	-22.3	34.3	41.19	74.0	20.8	H
10479.850	50.1	-29.6	37.8	41.94	68.3	18.2	V
15720.250	51.2	-24.4	40.4	35.19	68.3	17.1	V
16810.350	55.8	-23.0	41.9	36.90	68.3	12.5	H
17052.900	56.5	-23.0	42.1	37.43	68.3	11.8	V

Channel 52

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5206.600	53.8	-23.3	34.3	42.79	74.0	20.2	H
5311.600	54.1	-22.5	34.3	42.33	74.0	19.9	V
10520.000	52.3	-29.6	37.8	44.13	68.3	16.0	H
15780.200	52.8	-24.2	40.4	36.52	74.0	21.2	H
16853.250	57.3	-23.0	42.0	38.34	68.3	11.0	H
16993.500	57.3	-23.0	42.2	38.10	68.3	11.0	H

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Channel 56

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5228.000	54.6	-23.4	34.3	43.65	68.3	13.7	H
5333.400	54.8	-22.4	34.3	42.86	68.3	13.5	H
10559.600	52.8	-29.4	37.8	44.41	68.3	15.5	V
15840.150	53.2	-24.1	40.5	36.72	74.0	20.8	V
17176.650	57.1	-22.9	42.0	38.03	68.3	11.2	V
17606.750	58.4	-22.2	41.6	39.01	68.3	9.9	V

Channel 64

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5351.001	56.9	-22.3	34.3	44.81	74.0	17.1	H
5351.406	57.6	-22.3	34.3	45.58	74.0	16.4	H
10639.900	53.1	-29.3	37.9	44.50	74.0	20.9	H
15960.050	53.1	-23.8	40.7	36.27	74.0	20.9	H
17648.550	57.8	-22.1	41.6	38.27	68.3	10.5	H
17685.400	57.8	-22.1	41.6	38.43	68.3	10.5	V

Channel 100

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5445.910	55.0	-22.7	34.4	43.26	74.0	19.0	H
5447.560	55.4	-22.7	34.4	43.75	74.0	18.6	H
10999.600	49.6	-29.9	38.0	41.48	74.0	24.4	H
16500.150	54.6	-23.2	41.5	36.30	68.3	13.7	V
16785.600	56.1	-23.0	41.9	37.22	68.3	12.2	H
17110.100	57.8	-23.0	42.1	38.78	68.3	10.5	H

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Channel 120

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5523.400	54.5	-22.6	34.4	42.64	68.3	13.8	H
5652.400	54.3	-22.8	34.7	42.46	68.3	14.0	H
11200.350	50.4	-30.4	38.1	42.79	74.0	23.6	H
16799.900	54.7	-23.0	41.9	35.78	68.3	13.6	H
17161.800	56.4	-23.0	42.0	37.34	68.3	11.9	H
17480.250	56.0	-23.0	41.6	37.41	68.3	12.3	V

Channel 140

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5726.913	61.1	-23.0	34.8	49.29	74.0	12.9	H
5728.150	60.9	-23.0	34.8	49.09	74.0	13.1	H
11400.000	51.9	-29.7	38.2	43.45	74.0	22.1	V
17100.200	55.3	-23.0	42.1	36.24	68.3	13.0	V
17257.500	57.9	-22.8	41.9	38.79	68.3	10.4	H
17508.850	58.0	-22.8	41.6	39.23	68.3	10.3	H

Channel 144

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5667.200	54.2	-22.8	34.7	42.32	68.3	14.1	H
5807.200	53.6	-22.7	35.0	41.38	68.3	14.7	H
11439.600	52.3	-29.5	38.2	43.54	74.0	21.8	V
17160.150	54.3	-23.0	42.0	35.31	68.3	14.0	H
17368.050	56.0	-23.0	41.8	37.19	68.3	12.3	V
17518.750	56.2	-22.8	41.6	37.39	68.3	12.1	H

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Channel 36

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5146.668	56.6	-23.3	34.3	45.65	74.0	17.4	H
5148.155	56.9	-23.3	34.3	45.87	74.0	17.1	H
10359.950	51.1	-29.7	37.6	43.13	68.3	17.2	H
15539.850	50.8	-24.5	40.1	35.13	68.3	17.5	V
16975.900	56.3	-23.0	42.2	37.18	68.3	12.0	V
17394.450	56.0	-23.0	41.7	37.32	68.3	12.3	H

Channel 40

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5120.400	53.0	-23.4	34.2	42.08	68.3	15.3	H
5383.200	53.8	-22.3	34.4	41.77	68.3	14.5	H
10400.100	50.1	-29.3	37.7	41.75	68.3	18.2	V
15998.000	51.0	-23.7	40.7	34.06	68.3	17.3	H
16870.300	57.1	-23.0	42.0	38.09	68.3	11.2	V
17066.100	57.0	-23.0	42.1	37.88	68.3	11.3	V

Channel 48

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5142.400	52.2	-23.3	34.3	41.24	74.0	21.8	H
5367.400	54.1	-22.3	34.3	42.00	74.0	19.9	H
10479.850	50.7	-29.6	37.8	42.46	68.3	17.6	V
15720.250	51.0	-24.4	40.4	35.03	68.3	17.3	V
17043.000	56.5	-23.0	42.1	37.40	68.3	11.8	V
17172.250	56.4	-22.9	42.0	37.32	68.3	11.9	V

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Channel 52

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5199.200	54.5	-23.2	34.3	43.42	74.0	19.5	H
5308.800	54.4	-22.6	34.3	42.63	74.0	19.6	H
10520.000	52.3	-29.6	37.8	44.14	68.3	16.0	V
15780.200	53.0	-24.2	40.4	36.75	74.0	21.0	V
16952.800	57.0	-23.0	42.1	37.89	68.3	11.3	V
17047.400	57.1	-23.0	42.1	38.00	68.3	11.2	V

Channel 56

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5228.200	54.5	-23.4	34.3	43.51	68.3	13.8	H
5331.800	54.6	-22.4	34.3	42.66	68.3	13.7	H
10559.600	52.5	-29.4	37.8	44.09	68.3	15.8	V
15840.150	53.2	-24.1	40.5	36.76	74.0	20.8	H
17508.300	57.6	-22.8	41.6	38.85	68.3	10.7	H
17591.900	57.7	-22.3	41.6	38.38	68.3	10.6	H

Channel 64

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5351.163	57.7	-22.3	34.3	45.68	74.0	16.3	H
5353.755	57.7	-22.3	34.3	45.69	74.0	16.3	H
10639.900	52.8	-29.3	37.9	44.28	74.0	21.2	V
15960.050	53.4	-23.8	40.7	36.54	74.0	20.6	H
16865.900	57.3	-23.0	42.0	38.31	68.3	11.0	V
17424.150	57.4	-23.1	41.7	38.85	68.3	10.9	V

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Channel 100

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5447.455	56.2	-22.7	34.4	44.53	74.0	17.8	H
5448.910	55.5	-22.7	34.4	43.81	74.0	18.5	H
11000.150	50.0	-29.9	38.0	41.89	74.0	24.0	V
16500.150	55.8	-23.2	41.5	37.44	68.3	12.5	H
16880.200	56.2	-23.0	42.0	37.20	68.3	12.1	V
17090.300	55.9	-23.0	42.1	36.81	68.3	12.4	H

Channel 120

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5532.000	52.9	-22.6	34.5	41.04	68.3	15.4	H
5648.200	54.4	-22.8	34.7	42.53	68.3	13.9	H
11199.800	50.1	-30.4	38.1	42.45	74.0	23.9	H
16799.900	54.3	-23.0	41.9	35.37	68.3	14.0	V
17058.400	56.5	-23.0	42.1	37.38	68.3	11.8	V
17599.600	56.8	-22.2	41.6	37.47	68.3	11.5	H

Channel 140

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5725.125	63.1	-23.0	34.8	51.24	74.0	10.9	V
5725.563	61.1	-23.0	34.8	49.23	74.0	12.9	H
11400.000	51.1	-29.7	38.2	42.70	74.0	22.9	V
17100.200	54.6	-23.0	42.1	35.59	68.3	13.7	H
17230.550	56.1	-22.9	41.9	37.02	68.3	12.2	H
17353.750	56.6	-22.9	41.8	37.79	68.3	11.7	V

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Channel 144

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5632.400	53.2	-22.8	34.6	41.38	68.3	15.1	H
5773.000	54.9	-22.9	34.9	42.86	68.3	13.4	V
11440.150	51.9	-29.5	38.2	43.16	74.0	22.1	H
17160.150	54.2	-23.0	42.0	35.12	68.3	14.1	V
17324.600	56.0	-22.9	41.8	37.07	68.3	12.3	V
17581.450	56.3	-22.4	41.6	37.08	68.3	12.0	V

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Channel 38

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5416.563	63.9	-22.4	34.4	51.99	74.0	10.1	H
5147.945	65.2	-23.3	34.3	54.17	74.0	8.8	H
10379.750	51.7	-29.5	37.7	43.51	68.3	16.6	H
15570.100	51.7	-24.5	40.2	35.98	68.3	16.6	V
17535.800	57.3	-22.7	41.6	38.37	68.3	11.0	V
17695.850	57.5	-22.2	41.6	38.12	68.3	10.8	V

Channel 46

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5130.400	52.8	-23.3	34.3	41.92	74.0	21.2	H
5365.600	53.5	-22.3	34.3	41.42	74.0	20.5	H
10459.500	52.7	-29.5	37.8	44.44	68.3	15.6	V
15690.000	51.5	-24.4	40.3	35.61	68.3	16.8	H
17505.000	57.7	-22.9	41.6	38.97	68.3	10.6	V
17600.700	58.4	-22.2	41.6	39.09	68.3	9.9	H

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Channel 54

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5167.200	54.2	-23.2	34.3	43.20	68.3	14.1	V
5348.400	54.0	-22.3	34.3	41.93	68.3	14.3	H
10539.800	50.6	-29.5	37.8	42.30	68.3	17.7	H
15809.900	51.5	-24.1	40.5	35.19	74.0	22.5	V
16480.350	56.3	-23.1	41.5	37.98	68.3	12.0	V
16869.200	56.7	-23.0	42.0	37.66	68.3	11.6	H

Channel 62

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5350.205	66.0	-22.3	34.3	53.99	74.0	8.0	H
5351.825	66.5	-22.3	34.3	54.41	74.0	7.5	H
10619.550	51.3	-29.2	37.8	42.62	68.3	17.0	V
15929.800	51.2	-23.9	40.6	34.43	74.0	22.8	V
16832.350	55.9	-23.0	42.0	36.96	68.3	12.4	V
17035.300	57.2	-23.0	42.2	38.06	68.3	11.1	H

Channel 102

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5456.755	60.1	-22.7	34.4	48.40	74.0	13.9	H
5459.140	61.7	-22.7	34.4	49.98	74.0	12.3	H
11019.950	49.5	-29.8	38.0	41.34	74.0	24.5	V
16529.850	54.4	-23.2	41.5	36.12	68.3	13.9	H
16874.700	56.5	-23.0	42.0	37.44	68.3	11.8	V
17142.000	57.1	-23.0	42.0	38.04	68.3	11.2	H

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Channel 118

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5522.400	54.9	-22.6	34.4	43.13	68.3	13.4	H
5661.400	54.4	-22.8	34.7	42.58	68.3	13.9	H
11180.000	48.4	-30.4	38.1	40.79	74.0	25.6	V
16770.200	53.5	-23.0	41.9	34.61	68.3	14.8	V
16996.800	56.3	-23.0	42.2	37.12	68.3	12.0	H
17273.450	56.5	-22.8	41.9	37.39	68.3	11.8	H

Channel 134

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5729.512	58.7	-23.0	34.8	46.89	74.0	15.3	H
5733.675	58.0	-23.0	34.8	46.18	74.0	16.0	V
11326.300	49.1	-30.1	38.1	41.09	74.0	24.9	H
17010.000	54.3	-23.0	42.2	35.15	68.3	14.0	H
17166.750	56.1	-23.0	42.0	37.02	68.3	12.2	H
17417.000	56.2	-23.1	41.7	37.60	68.3	12.1	H

Channel 142

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5600.400	53.7	-22.8	34.6	41.92	68.3	14.6	H
5811.800	54.0	-22.7	35.0	41.68	68.3	14.3	H
11420.350	49.4	-29.6	38.2	40.86	74.0	24.6	V
17129.900	54.4	-23.0	42.0	35.35	68.3	13.9	V
17289.400	55.8	-22.8	41.9	36.73	68.3	12.5	V
17425.250	55.8	-23.1	41.7	37.19	68.3	12.5	V

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Channel 36

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5144.130	56.5	-23.3	34.3	45.53	74.0	17.5	H
5148.313	56.8	-23.3	34.3	45.82	74.0	17.2	V
10359.950	52.8	-29.7	37.6	44.84	68.3	15.5	H
15539.850	51.7	-24.5	40.1	36.04	68.3	16.6	V
16799.350	57.5	-23.0	41.9	38.58	68.3	10.8	V
17387.850	57.4	-23.0	41.7	38.69	68.3	10.9	V

Channel 40

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5124.600	52.6	-23.3	34.3	41.70	68.3	15.7	H
5371.800	52.6	-22.3	34.4	40.51	68.3	15.7	H
10399.000	53.1	-29.3	37.7	44.74	68.3	15.2	V
15599.800	52.2	-24.5	40.2	36.45	68.3	16.1	V
17568.250	57.3	-22.4	41.6	38.17	68.3	11.0	H
17663.950	57.2	-22.1	41.6	37.76	68.3	11.1	H

Channel 48

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5103.200	53.5	-23.4	34.2	42.68	74.0	20.5	H
5376.200	52.9	-22.3	34.4	40.86	74.0	21.1	H
10479.850	51.8	-29.6	37.8	43.62	68.3	16.5	H
15720.250	51.9	-24.4	40.4	35.85	68.3	16.4	H
16948.950	57.3	-23.0	42.1	38.17	68.3	11.0	V
17534.700	57.3	-22.7	41.6	38.41	68.3	11.0	H

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Channel 52

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5207.600	53.2	-23.3	34.3	42.18	74.0	20.8	H
5317.600	54.2	-22.5	34.3	42.41	74.0	19.8	H
10520.000	53.0	-29.6	37.8	44.80	68.3	15.3	H
15780.200	53.0	-24.2	40.4	36.74	74.0	21.0	V
16775.700	57.6	-23.0	41.9	38.75	68.3	10.7	V
17030.900	57.4	-23.0	42.2	38.24	68.3	10.9	V

Channel 56

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5226.400	52.6	-23.3	34.3	41.61	68.3	15.7	V
5350.000	54.0	-22.3	34.3	41.95	68.3	14.3	H
10559.600	52.1	-29.4	37.8	43.75	68.3	16.2	V
15840.150	52.3	-24.1	40.5	35.84	74.0	21.7	H
16929.150	57.8	-23.0	42.1	38.70	68.3	10.5	V
17076.000	57.6	-23.0	42.1	38.55	68.3	10.7	V

Channel 64

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5350.556	56.4	-22.3	34.3	44.36	74.0	17.6	V
5372.291	56.1	-22.3	34.4	44.02	74.0	17.9	H
10639.900	52.6	-29.3	37.9	44.04	74.0	21.4	V
15960.050	53.5	-23.8	40.7	36.70	74.0	20.5	H
16868.650	57.8	-23.0	42.0	38.75	68.3	10.5	H
16955.000	57.3	-23.0	42.1	38.14	68.3	11.0	V

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Channel 100

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5447.440	55.8	-22.7	34.4	44.07	74.0	18.2	H
5448.295	56.2	-22.7	34.4	44.52	74.0	17.8	V
11000.150	50.5	-29.9	38.0	42.40	74.0	23.5	V
16500.150	53.9	-23.2	41.5	35.56	68.3	14.4	V
16922.000	56.2	-23.0	42.1	37.14	68.3	12.1	V
17261.900	55.4	-22.8	41.9	36.34	68.3	12.9	V

Channel 120

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5547.400	54.8	-22.6	34.5	42.92	68.3	13.5	H
5662.600	53.9	-22.8	34.7	42.04	68.3	14.4	H
11200.350	50.3	-30.4	38.1	42.67	74.0	23.7	V
16800.000	54.0	-23.0	41.9	35.07	68.3	14.3	V
16872.950	55.9	-23.0	42.0	36.86	68.3	12.4	V
17067.750	57.3	-23.0	42.1	38.21	68.3	11.0	H

Channel 140

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5725.200	59.7	-23.0	34.8	47.90	74.0	14.3	H
5725.525	59.3	-23.0	34.8	47.46	74.0	14.7	H
11400.000	51.6	-29.7	38.2	43.20	74.0	22.4	V
17100.200	55.7	-23.0	42.1	36.61	68.3	12.6	V
17191.500	57.0	-22.9	42.0	38.00	68.3	11.3	V
17511.050	55.2	-22.8	41.6	36.42	68.3	13.1	V

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Channel 144

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5647.600	53.5	-22.8	34.7	41.69	68.3	14.8	H
5812.000	54.3	-22.7	35.0	41.99	68.3	14.0	H
11433.550	50.5	-29.5	38.2	41.82	74.0	23.5	H
17160.150	54.4	-23.0	42.0	35.33	68.3	13.9	V
17405.450	55.7	-23.1	41.7	37.09	68.3	12.6	V
17592.450	56.4	-22.3	41.6	37.11	68.3	11.9	V

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Channel 38

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5146.195	61.1	-23.3	34.3	50.15	74.0	12.9	H
5147.333	60.9	-23.3	34.3	49.92	74.0	13.1	H
10379.750	51.4	-29.5	37.7	43.28	68.3	16.9	V
15570.100	52.6	-24.5	40.2	36.91	68.3	15.7	V
16955.000	57.1	-23.0	42.1	38.00	68.3	11.2	V
17520.950	57.7	-22.8	41.6	38.83	68.3	10.6	H

Channel 46

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5104.800	53.1	-23.4	34.2	42.26	74.0	20.9	H
5375.000	53.1	-22.3	34.4	41.01	74.0	20.9	H
10460.050	52.4	-29.5	37.8	44.10	68.3	15.9	V
15690.000	52.0	-24.4	40.3	36.12	68.3	16.3	V
17282.800	57.4	-22.8	41.9	38.29	68.3	10.9	V
17697.500	57.7	-22.2	41.6	38.33	68.3	10.6	H

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Channel 54

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5167.600	54.4	-23.2	34.3	43.36	68.3	13.9	H
5347.600	54.4	-22.3	34.3	42.35	68.3	13.9	H
10539.800	51.2	-29.5	37.8	42.90	68.3	17.1	H
15809.900	52.4	-24.1	40.5	36.09	74.0	21.6	V
16676.700	55.5	-23.2	41.7	36.93	68.3	12.8	V
17147.500	57.2	-23.0	42.0	38.21	68.3	11.1	V

Channel 62

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5351.973	59.1	-22.3	34.3	47.08	74.0	14.9	H
5352.446	60.1	-22.3	34.3	48.06	74.0	13.9	H
10619.550	50.6	-29.2	37.8	41.90	68.3	17.7	H
15929.800	52.0	-23.9	40.6	35.27	74.0	22.0	H
16622.800	56.2	-23.3	41.7	37.89	68.3	12.1	H
17402.150	56.2	-23.0	41.7	37.50	68.3	12.1	V

Channel 102

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5402.000	53.7	-22.3	34.4	41.69	74.0	20.3	H
5811.800	54.0	-22.7	35.0	41.68	74.0	20.0	H
11019.950	50.1	-29.8	38.0	41.91	74.0	23.9	H
16529.850	54.1	-23.2	41.5	35.73	68.3	14.2	H
16944.000	56.6	-23.0	42.1	37.46	68.3	11.7	H
17274.550	56.7	-22.8	41.9	37.59	68.3	11.6	V

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Channel 118

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5513.800	53.9	-22.6	34.4	42.12	68.3	14.4	H
5706.400	54.1	-22.9	34.8	42.29	68.3	14.2	H
11180.000	48.2	-30.4	38.1	40.57	74.0	25.8	V
16770.200	54.3	-23.0	41.9	35.41	68.3	14.0	V
17025.950	56.5	-23.0	42.2	37.40	68.3	11.8	V
17504.450	57.3	-22.9	41.6	38.62	68.3	11.0	V

Channel 134

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5725.613	56.9	-23.0	34.8	45.06	74.0	17.1	H
5726.700	56.7	-23.0	34.8	44.90	74.0	17.3	H
11338.400	48.8	-30.0	38.1	40.70	74.0	25.2	V
17010.000	54.3	-23.0	42.2	35.17	68.3	14.0	H
17058.950	57.6	-23.0	42.1	38.46	68.3	10.7	H
17295.450	56.7	-22.8	41.8	37.61	68.3	11.6	H

Channel 142

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5601.400	53.5	-22.8	34.6	41.74	68.3	14.8	H
5815.400	53.8	-22.6	35.0	41.49	68.3	14.5	H
11423.100	49.1	-29.6	38.2	40.50	74.0	24.9	V
17129.900	54.5	-23.0	42.0	35.44	68.3	13.8	H
17258.050	56.5	-22.8	41.9	37.43	68.3	11.8	V
17540.200	56.5	-22.6	41.6	37.50	68.3	11.8	V

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802.11ac-HT80

Channel 42

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5125.388	60.3	-33.3	34.3	59.34	74.0	13.7	H
5139.825	61.2	-33.3	34.3	60.20	74.0	12.8	V
10419.900	51.9	-29.3	37.5	43.69	68.3	16.4	H
15630.050	51.4	-24.5	40.4	35.62	74.0	22.6	H
16873.050	56.7	-23.0	41.6	38.07	68.3	11.6	H
17643.600	57.2	-22.0	41.2	38.04	68.3	11.1	H

Channel 58

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5368.659	60.9	-32.3	34.5	58.66	74.0	13.1	H
5370.995	60.3	-32.3	34.5	58.10	74.0	13.7	H
10579.950	50.9	-29.3	37.6	42.60	68.3	17.4	V
15869.850	52.4	-24.0	40.6	35.78	74.0	21.6	V
17003.950	56.6	-23.0	41.7	37.96	68.3	11.7	V
17063.900	56.4	-23.0	41.6	37.80	68.3	11.9	V

Channel 106

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5440.960	59.7	-32.6	34.6	57.78	74.0	14.3	H
5459.725	59.3	-32.7	34.6	57.40	74.0	14.7	H
11059.550	49.2	-29.9	38.0	41.08	74.0	24.8	H
16589.800	53.8	-23.3	41.5	35.65	68.3	14.5	H
16851.050	58.0	-23.0	41.6	39.44	68.3	10.3	H
17064.450	56.9	-23.0	41.6	38.33	68.3	11.4	V

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Channel 138

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
5595.800	54.9	-32.8	34.7	52.93	68.3	13.4	H
5770.800	60.5	-32.9	34.9	58.51	68.3	7.8	H
11379.650	49.5	-29.8	38.4	41.02	74.0	24.5	V
17069.950	54.5	-23.0	41.6	35.94	68.3	13.8	H
17282.250	56.9	-22.8	41.4	38.25	68.3	11.4	H
17407.650	56.4	-23.1	41.3	38.17	68.3	11.9	H

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A.7. AC Power line 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		
		802.11a	Idle	
0.15 to 0.5	66 to 56	Fig.57	Fig.58	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		
		802.11a	Idle	
0.15 to 0.5	67 56 to 46	Fig.57	Fig.58	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:

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Traffic:

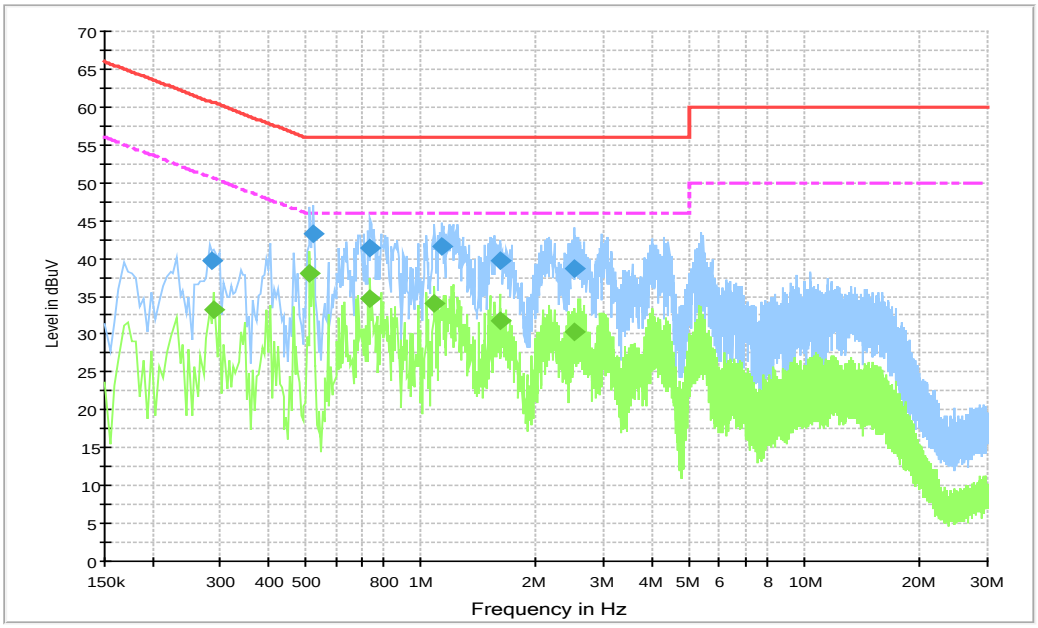

Fig. 57 Conducted Emission (802.11a, Ch36, TX)

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)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.285000	39.7	1000.	9.000	L1	19.9	20.9	60.7
0.523500	43.3	1000.	9.000	L1	20.0	12.7	56.0
0.739500	41.5	1000.	9.000	L1	19.9	14.5	56.0
1.135500	41.5	1000.	9.000	L1	19.8	14.5	56.0
1.603500	39.7	1000.	9.000	L1	19.8	16.3	56.0
2.517000	38.7	1000.	9.000	L1	19.8	17.3	56.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.289500	33.3	1000.	9.000	L1	19.9	17.2	50.5
0.514500	38.1	1000.	9.000	L1	20.0	7.9	46.0
0.739500	34.6	1000.	9.000	L1	19.9	11.4	46.0
1.086000	34.0	1000.	9.000	L1	19.8	12.0	46.0
1.603500	31.7	1000.	9.000	L1	19.8	14.3	46.0
2.503500	30.3	1000.	9.000	L1	19.8	15.7	46.0

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

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Idle:

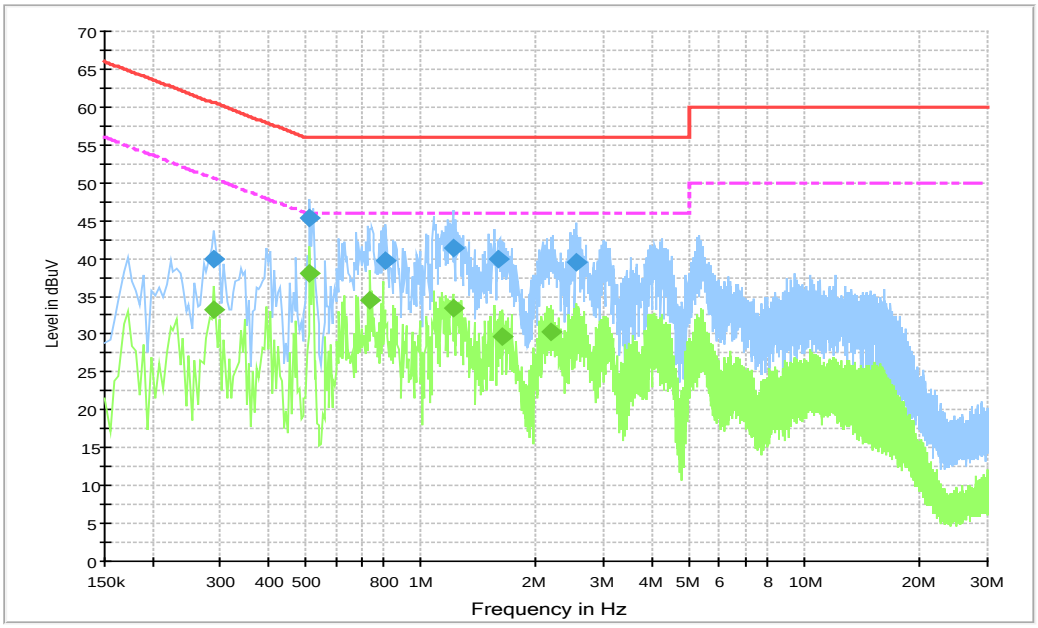

Fig. 58 Conducted Emission(802.11a, IDLE)

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)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.289500	39.8	1000.	9.000	L1	19.9	20.7	60.5
0.514500	45.4	1000.	9.000	L1	20.0	10.6	56.0
0.811500	39.7	1000.	9.000	L1	19.9	16.3	56.0
1.212000	41.4	1000.	9.000	L1	19.8	14.6	56.0
1.599000	39.9	1000.	9.000	L1	19.8	16.1	56.0
2.544000	39.5	1000.	9.000	L1	19.8	16.5	56.0

Final Result 2

Frequency (MHz)	Average (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.289500	33.3	1000.	9.000	L1	19.9	17.3	50.5
0.514500	38.1	1000.	9.000	L1	20.0	7.9	46.0
0.739500	34.6	1000.	9.000	L1	19.9	11.4	46.0
1.212000	33.4	1000.	9.000	L1	19.8	12.6	46.0
1.630500	29.6	1000.	9.000	L1	19.8	16.4	46.0
2.179500	30.3	1000.	9.000	L1	19.8	15.7	46.0

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

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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.59	17.96	P
	5200 MHz	Fig.60	18.02	P
	5240 MHz	Fig.61	17.95	P
802.11ac HT20	5180 MHz	Fig.62	18.59	P
	5200 MHz	Fig.63	18.60	P
	5240 MHz	Fig.64	18.61	P
802.11n HT40	5190 MHz	Fig.65	36.39	P
	5230 MHz	Fig.66	36.35	P
802.11ac HT80	5210 MHz	Fig.67	74.66	P

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Conclusion: PASS

Test graphs as below:

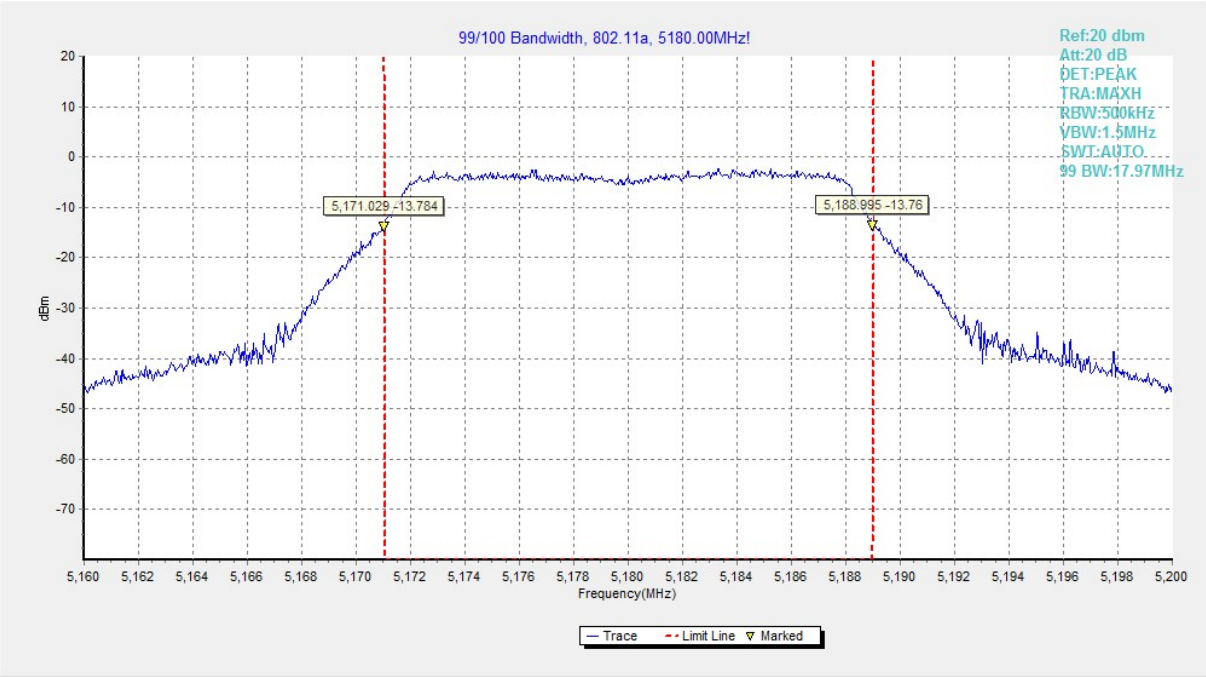

Fig.59 99% Occupied bandwidth (802.11a, 5180MHz)

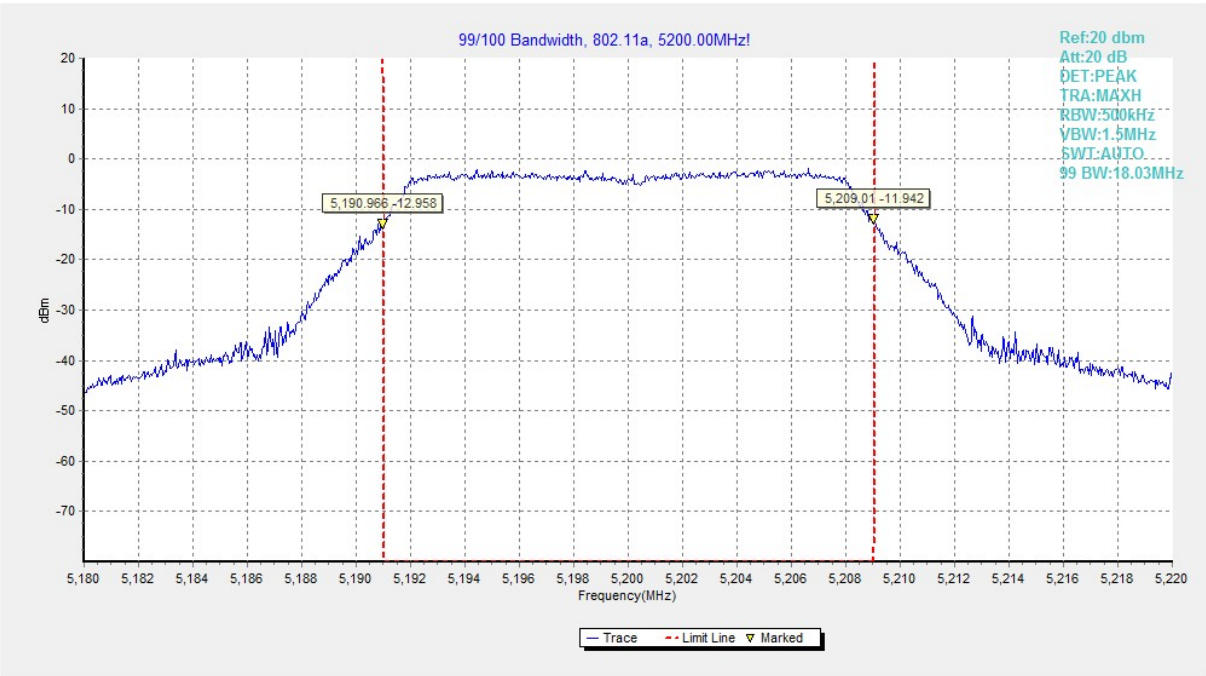

Fig.60 99% Occupied bandwidth (802.11a, 5200MHz)

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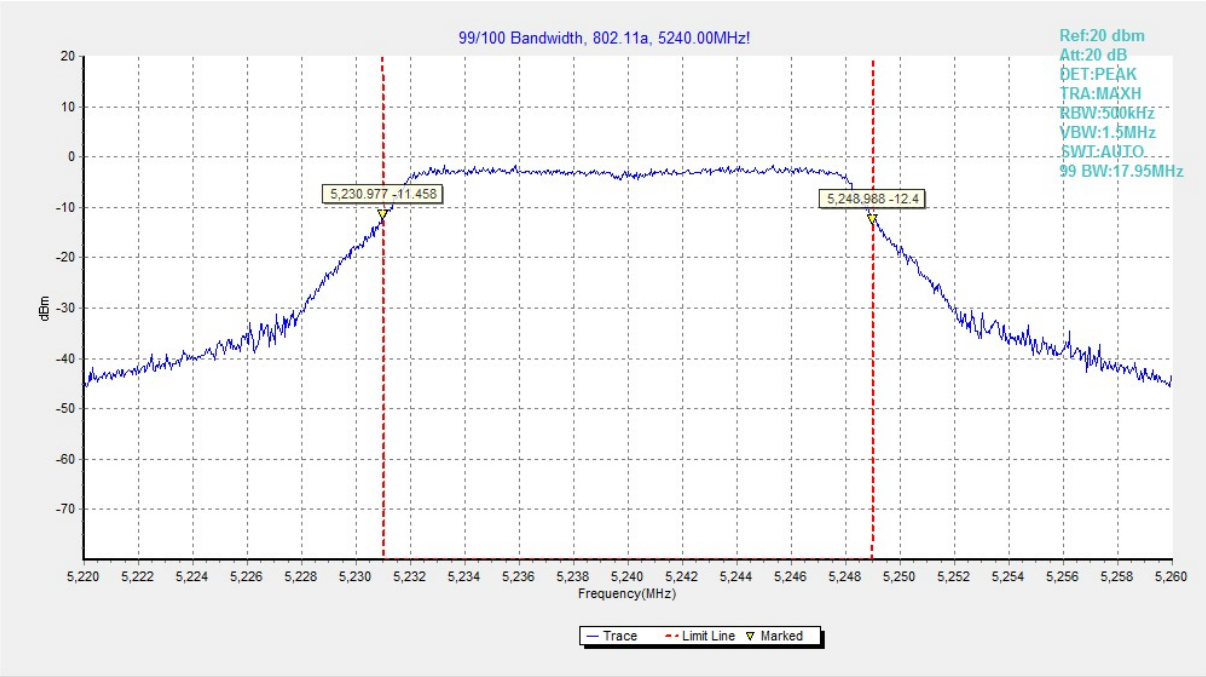

Fig.61 99% Occupied bandwidth (802.11a, 5240MHz)

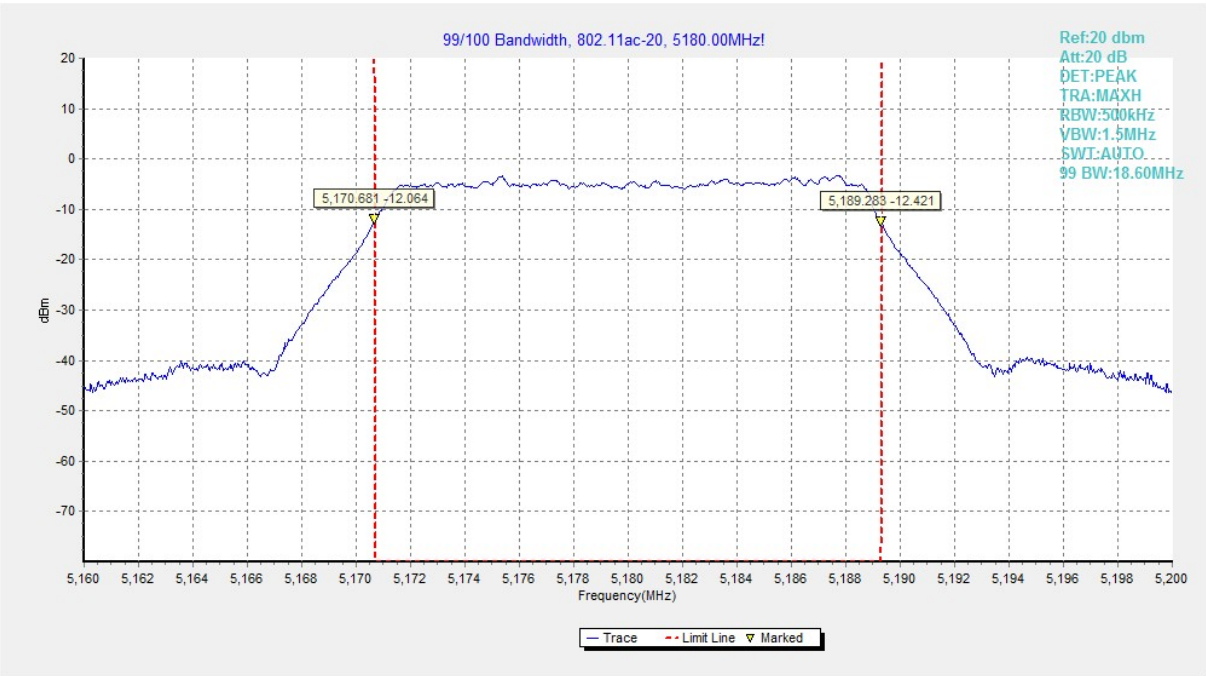

Fig.62 99% Occupied bandwidth (802.11ac-HT20, 5180MHz)

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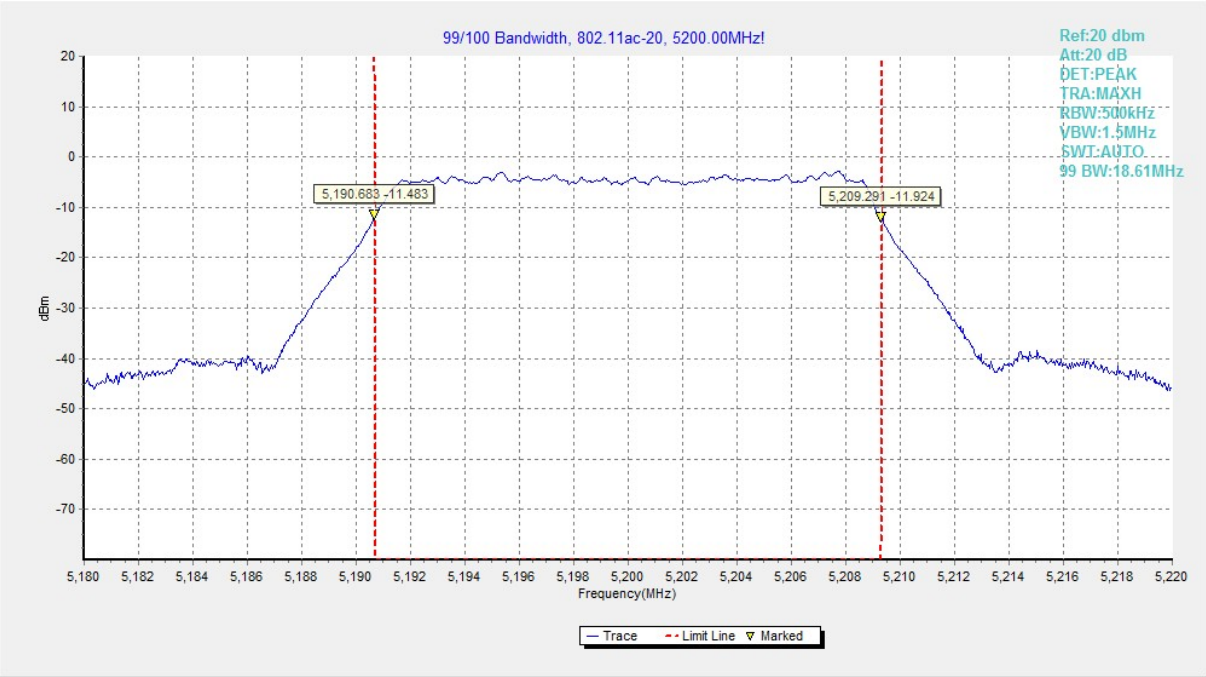

Fig.63 99% Occupied bandwidth (802.11ac-HT20, 5200MHz)

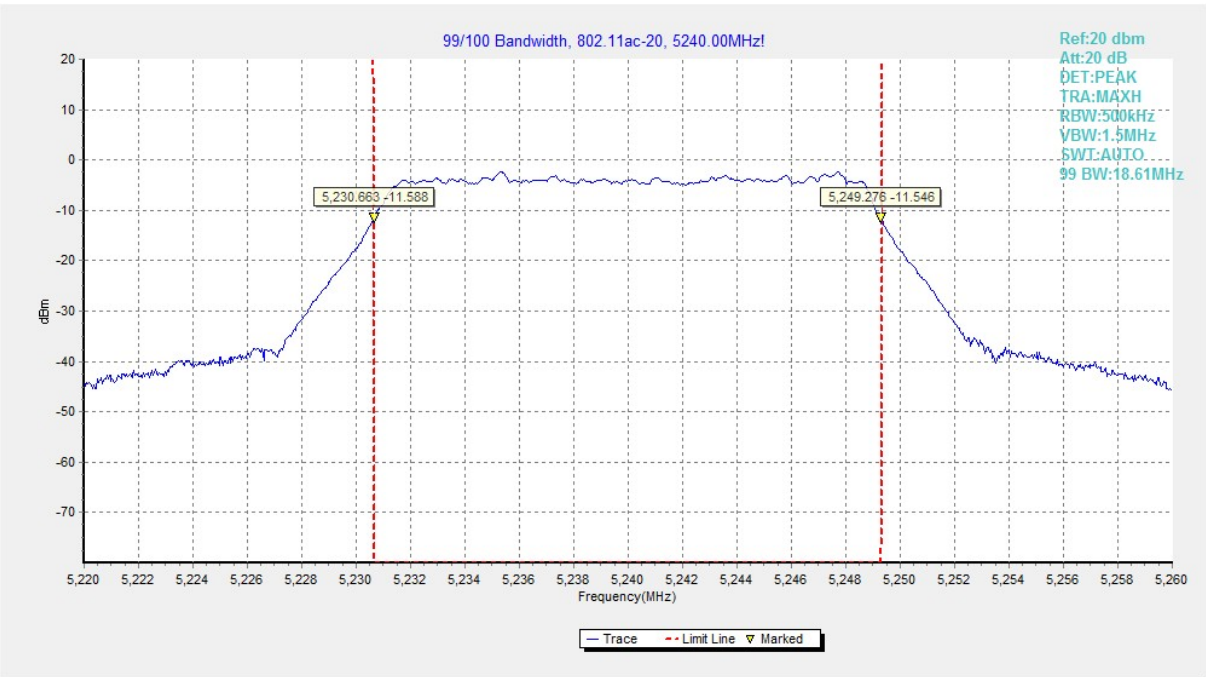

Fig.64 99% Occupied bandwidth (802.11ac-HT20, 5240MHz)

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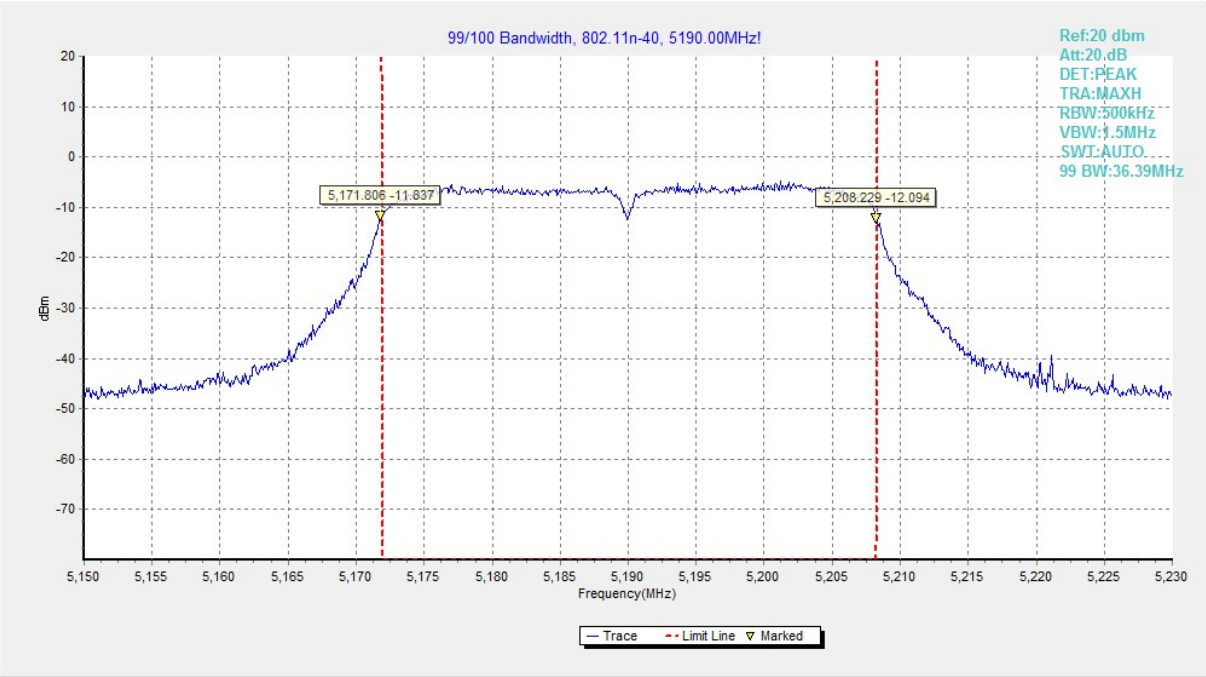

Fig.65 99% Occupied bandwidth (802.11n-HT40, 5190MHz)

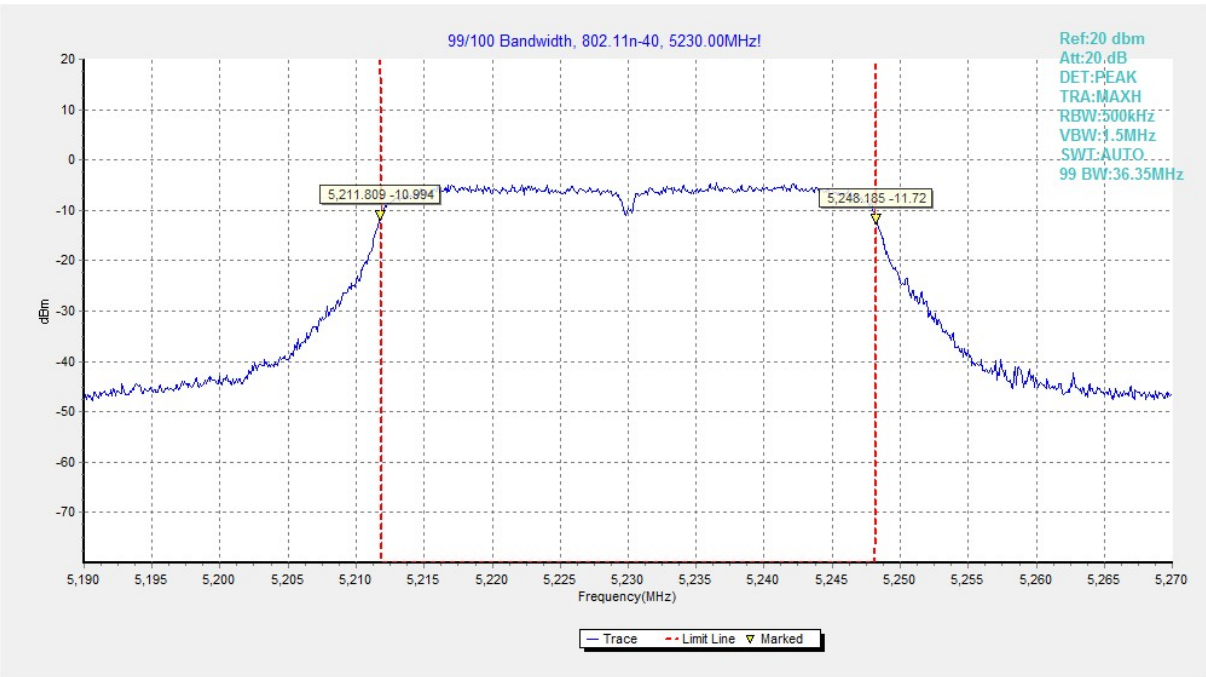

Fig.66 99% Occupied bandwidth (802.11n-HT40, 5230MHz)

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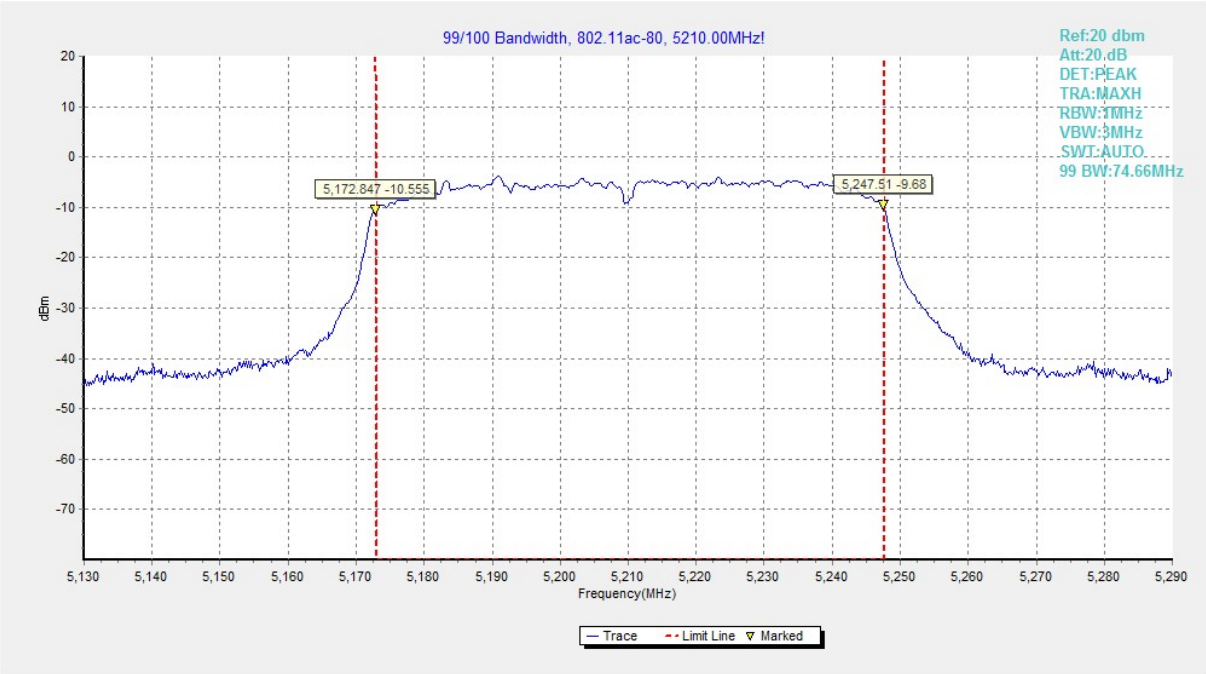

Fig.67 99% Occupied bandwidth (802.11ac-HT80, 5210MHz)

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).

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ANNEX B: 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

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

Electromagnetic Compatibility & Telecommunications

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. 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).

2020-09-29 through 2021-09-30
Effective Dates

DEPARTMENT OF COMMERCE · UNITED STATES OF AMERICA

For the National Voluntary Laboratory Accreditation Program

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

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