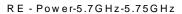


Fig. 60 Band Edges (802.11ac-HT20, 5500MHz)



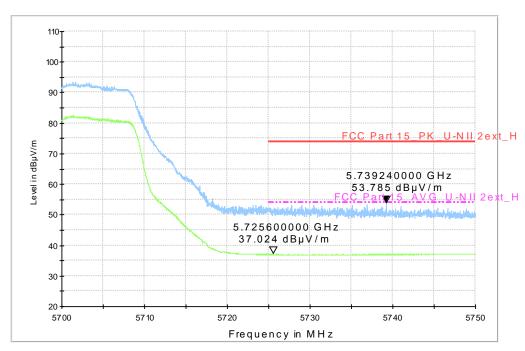


Fig. 61 Band Edges (802.11ac-HT20, 5700MHz)



RE - Power-5.125GHz-5.175GHz

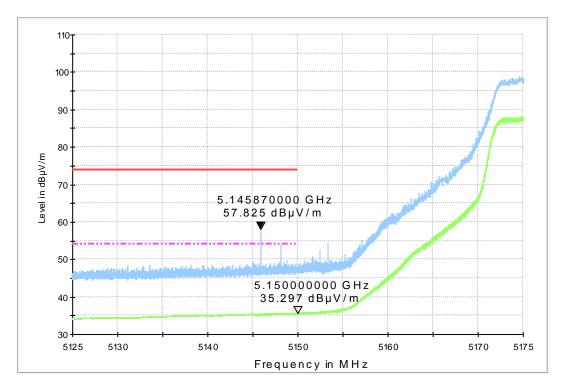


Fig. 62 Band Edges (802.11ac-HT40, 5190MHz)

RE-Power-5.325GHz-5.375GHz

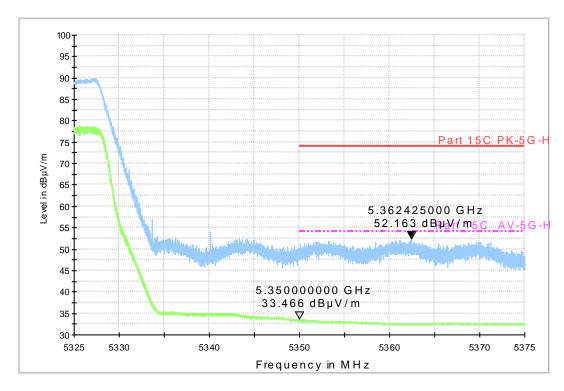


Fig. 63 Band Edges (802.11ac-HT40, 5310MHz)



RE-Power-5.45GHz-5.50GHz

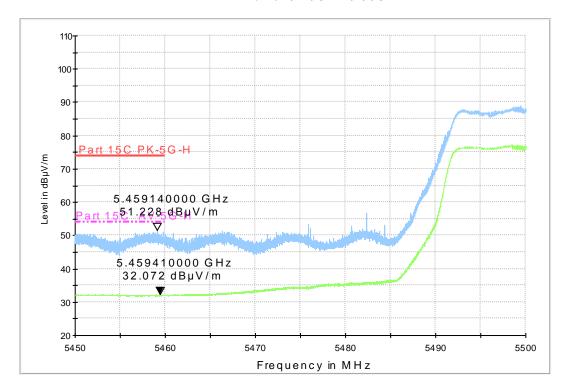


Fig. 64 Band Edges (802.11ac-HT40, 5510MHz)

RE-Power-5.7GHz-5.75GHz

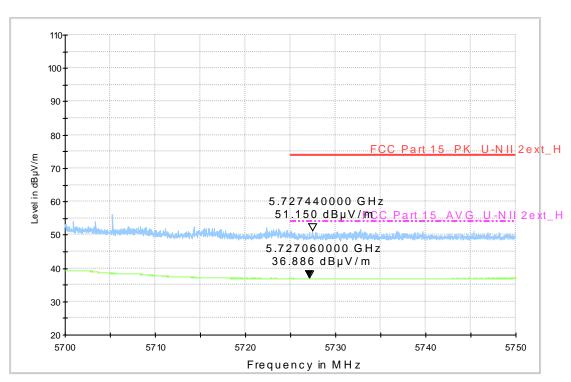


Fig. 65 Band Edges (802.11ac-HT40, 5670MHz)



RE - Power-5.125GHz-5.175GHz

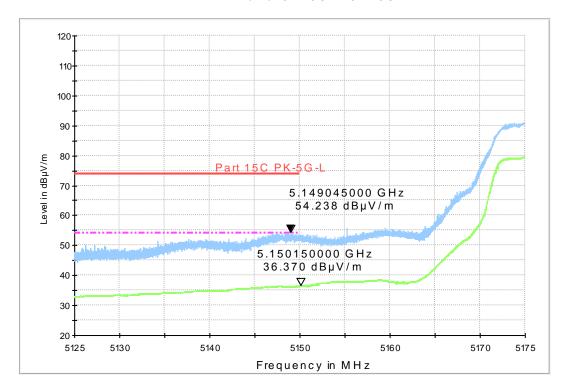


Fig. 66 Band Edges (802.11ac-HT80, 5210MHz)

RE-Power-5.325GHz-5.375GHz

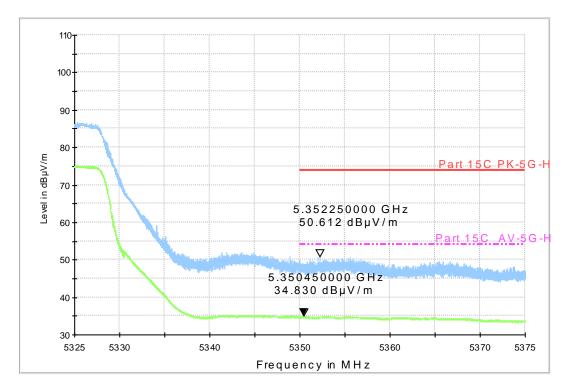


Fig. 67 Band Edges (802.11ac-HT80, 5290MHz)



#### RE-Power-5.45GHz-5.50GHz

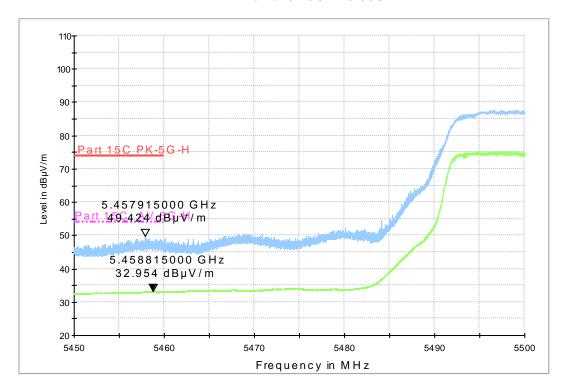


Fig. 68 Band Edges (802.11ac-HT80, 5530MHz)



# A.6. Transmitter Spurious Emission

#### **Measurement Limit:**

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

The measurement is made according to KDB 789033

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

#### Limit in restricted band:

Frequency of emission (MHz)	Field strength(dBµV/m)	Measurement distance(m)
30-88	40.0	3
88-216	43.5	3
216-960	46.0	3
Above 960	54.0	3

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

#### Measurement uncertainty:

Expanded measurement uncertainty for this test item is U =3.9dB, k=2.

#### **Measurement Results:**

### 802.11a mode

Mode	Channel	Frequency Range	Test Results	Conclusion
		1 GHz ~ 3 GHz		Р
	36(5180MHz)	3 GHz ~ 7 GHz		Р
		7 GHz ~ 18 GHz		Р
		30 MHz ~1 GHz		Р
		1 GHz ~ 3 GHz		Р
	40/E200MH-7)	3 GHz ~ 7 GHz		Р
	40(5200MHz)	7 GHz ~ 18 GHz		Р
		18 GHz ~ 26.5 GHz		Р
802.11a		26.5 GHz ~ 40 GHz		Р
802.11a	48(5240MHz)	1 GHz ~ 3 GHz		Р
		3 GHz ~ 7 GHz		Р
		7 GHz ~ 18 GHz		Р
		1 GHz ~ 3 GHz		Р
	52(5260MHz)	3 GHz ~ 7 GHz		Р
		7 GHz ~ 18 GHz		Р
		30 MHz ~1 GHz		Р
	56(5280MHz)	1 GHz ~ 3 GHz		Р
		3 GHz ~ 7 GHz		Р



	7 GHz ~ 18 GHz		Р
	18 GHz ~ 26.5 GHz		Р
	26.5 GHz ~ 40 GHz		Р
	1 GHz ~ 3 GHz		Р
64(5320MHz)	3 GHz ~ 7 GHz		Р
	7 GHz ~ 18 GHz		Р
	1 GHz ~ 3 GHz		Р
100(5500MHz)	3 GHz ~ 7 GHz		Р
	7 GHz ~ 18 GHz		Р
400/5000MU-)	30 MHz ~1 GHz		Р
	1 GHz ~ 3 GHz		Р
	3 GHz ~ 7 GHz		Р
120(3600101112)	7 GHz ~ 18 GHz		Р
	18 GHz ~ 26.5 GHz		Р
	26.5 GHz ~ 40 GHz		Р
	1 GHz ~ 3 GHz		Р
140(5700MHz)	3 GHz ~ 7 GHz		Р
	7 GHz ~ 18 GHz		Р
	100(5500MHz) 120(5600MHz)	18 GHz ~ 26.5 GHz 26.5 GHz ~ 40 GHz 1 GHz ~ 3 GHz 3 GHz ~ 7 GHz 7 GHz ~ 18 GHz 100(5500MHz) 100(5500MHz) 120(5600MHz) 120(	18 GHz ~ 26.5 GHz 26.5 GHz ~ 40 GHz 1 GHz ~ 3 GHz 3 GHz ~ 7 GHz 7 GHz ~ 18 GHz 100(5500MHz) 3 GHz ~ 7 GHz 100(5500MHz) 3 GHz ~ 7 GHz 7 GHz ~ 18 GHz 100(5500MHz) 3 GHz ~ 7 GHz 7 GHz ~ 18 GHz 1 GHz ~ 3 GHz 1 GHz ~ 3 GHz 1 GHz ~ 3 GHz 1 GHz ~ 18 GHz 1 GHz ~ 3 GHz

## 802.11n-HT20 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
		1 GHz ~ 3 GHz		Р
	36(5180MHz)	3 GHz ~ 7 GHz		Р
		7 GHz ~ 18 GHz		Р
		30 MHz ~1 GHz		Р
		1 GHz ~ 3 GHz		Р
	40(5200MHz)	3 GHz ~ 7 GHz		Р
	40(3200WHZ)	7 GHz ~ 18 GHz		Р
		18 GHz ~ 26.5 GHz		Р
		26.5 GHz ~ 40 GHz		Р
	48(5240MHz)	1 GHz ~ 3 GHz		Р
802.11n		3 GHz ~ 7 GHz		Р
-HT20		7 GHz ~ 18 GHz		Р
	52(5260MHz)	1 GHz ~ 3 GHz		Р
		3 GHz ~ 7 GHz		Р
		7 GHz ~ 18 GHz		Р
		30 MHz ~1 GHz		Р
		1 GHz ~ 3 GHz		Р
	EC(EOOMILIT)	3 GHz ~ 7 GHz		Р
	56(5280MHz)	7 GHz ~ 18 GHz		Р
		18 GHz ~ 26.5 GHz		Р
		26.5 GHz ~ 40 GHz		Р
	64(5320MHz)	1 GHz ~ 3 GHz		Р



		3 GHz ~ 7 GHz		Р
		7 GHz ~ 18 GHz		Р
		1 GHz ~ 3 GHz		Р
	100(5500MHz)	3 GHz ~ 7 GHz		Р
		7 GHz ~ 18 GHz		Р
	116(5580MHz)	30 MHz ~1 GHz		Р
		1 GHz ~ 3 GHz		Р
		3 GHz ~ 7 GHz		Р
		7 GHz ~ 18 GHz		Р
		18 GHz ~ 26.5 GHz		Р
		26.5 GHz ~ 40 GHz		Р
		1 GHz ~ 3 GHz		Р
	140(5700MHz)	3 GHz ~ 7 GHz		Р
		7 GHz ~ 18 GHz		Р

## 802.11n-HT40 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
		30 MHz ~1 GHz		Р
		1 GHz ~ 3 GHz		Р
	20/E400MUI=)	3 GHz ~ 7 GHz		Р
	38(5190MHz)	7 GHz ~ 18 GHz		Р
		18 GHz ~ 26.5 GHz		Р
		26.5 GHz ~ 40 GHz		Р
		1 GHz ~ 3 GHz		Р
	46(5230MHz)	3 GHz ~ 7 GHz		Р
		7 GHz ~ 18 GHz		Р
		30 MHz ~1 GHz		Р
	54(5270MHz)	1 GHz ~ 3 GHz		Р
802.11n		3 GHz ~ 7 GHz		Р
602.1111 HT40		7 GHz ~ 18 GHz		Р
П140		18 GHz ~ 26.5 GHz		Р
		26.5 GHz ~ 40 GHz		Р
		1 GHz ~ 3 GHz		Р
	62(5310MHz)	3 GHz ~ 7 GHz		Р
		7 GHz ~ 18 GHz		Р
		1 GHz ~ 3 GHz		Р
	102(5510MHz)	3 GHz ~ 7 GHz		Р
		7 GHz ~ 18 GHz		Р
		1 GHz ~ 3 GHz		Р
	134(5670MHz)	3 GHz ~ 7 GHz		Р
		7 GHz ~ 18 GHz		Р



## 802.11ac-HT20 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
		1 GHz ~ 3 GHz		Р
	36(5180MHz)	3 GHz ~ 7 GHz		Р
		7 GHz ~ 18 GHz		Р
		30 MHz ~1 GHz		Р
		1 GHz ~ 3 GHz		Р
	40/5000NALL=)	3 GHz ~ 7 GHz		Р
	40(5200MHz)	7 GHz ~ 18 GHz		Р
		18 GHz ~ 26.5 GHz		Р
		26.5 GHz ~ 40 GHz		Р
		1 GHz ~ 3 GHz		Р
	48(5240MHz)	3 GHz ~ 7 GHz		Р
		7 GHz ~ 18 GHz		Р
		1 GHz ~ 3 GHz		Р
	52(5260MHz)	3 GHz ~ 7 GHz		Р
		7 GHz ~ 18 GHz		Р
	56(5280MHz)	30 MHz ~1 GHz		Р
		1 GHz ~ 3 GHz		Р
802.11n		3 GHz ~ 7 GHz		Р
-HT20		7 GHz ~ 18 GHz		Р
		18 GHz ~ 26.5 GHz		Р
		26.5 GHz ~ 40 GHz		Р
		1 GHz ~ 3 GHz		Р
	64(5320MHz)	3 GHz ~ 7 GHz		Р
		7 GHz ~ 18 GHz		Р
		1 GHz ~ 3 GHz		Р
	100(5500MHz)	3 GHz ~ 7 GHz		Р
		7 GHz ~ 18 GHz		Р
		30 MHz ~1 GHz		Р
		1 GHz ~ 3 GHz		Р
	440/======	3 GHz ~ 7 GHz		Р
	116(5580MHz)	7 GHz ~ 18 GHz		Р
		18 GHz ~ 26.5 GHz		Р
		26.5 GHz ~ 40 GHz		Р
		1 GHz ~ 3 GHz		Р
	140(5700MHz)	3 GHz ~ 7 GHz		Р
	' '	7 GHz ~ 18 GHz		Р



### 802.11ac-HT40 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
		30 MHz ~1 GHz		Р
		1 GHz ~ 3 GHz		Р
	20/E100MU¬)	3 GHz ~ 7 GHz		Р
	38(5190MHz)	7 GHz ~ 18 GHz		Р
		18 GHz ~ 26.5 GHz		Р
		26.5 GHz ~ 40 GHz		Р
		1 GHz ~ 3 GHz		Р
	46(5230MHz)	3 GHz ~ 7 GHz		Р
		7 GHz ~ 18 GHz		Р
		30 MHz ~1 GHz		Р
	54(5270MHz)	1 GHz ~ 3 GHz		Р
802.11n		3 GHz ~ 7 GHz		Р
HT40		7 GHz ~ 18 GHz		Р
H140		18 GHz ~ 26.5 GHz		Р
		26.5 GHz ~ 40 GHz		Р
		1 GHz ~ 3 GHz		Р
	62(5310MHz)	3 GHz ~ 7 GHz		Р
		7 GHz ~ 18 GHz		Р
		1 GHz ~ 3 GHz		Р
	102(5510MHz)	3 GHz ~ 7 GHz		Р
		7 GHz ~ 18 GHz		Р
		1 GHz ~ 3 GHz		Р
	134(5670MHz)	3 GHz ~ 7 GHz		Р
		7 GHz ~ 18 GHz		Р

## 802.11ac-HT80 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
		1 GHz ~ 3 GHz		Р
	36(5210MHz)	3 GHz ~ 7 GHz		Р
		7 GHz ~ 18 GHz		Р
		30 MHz ~1 GHz		Р
	52(5290MHz) 100(5530MHz)	1 GHz ~ 3 GHz		Р
802.11ac		3 GHz ~ 7 GHz		Р
-HT80		7 GHz ~ 18 GHz		Р
		18 GHz ~ 26.5 GHz		Р
		26.5 GHz ~ 40 GHz		Р
		1 GHz ~ 3 GHz		Р
		3 GHz ~ 7 GHz		Р
		7 GHz ~ 18 GHz		Р

**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.

 $\ensuremath{P_{\text{Mea}}}$  is the field strength recorded from the instrument.

The measurement results are obtained as described below:

Result=P<sub>Mea</sub>+A<sub>Rpl=</sub> P<sub>Mea</sub>+Cable Loss+Antenna Factor

## **AVERAGE Results:**

#### 802.11a

#### Channel 36

Frequency (MHz)	Meas. Result (dBµV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBµV)	Limit (dBµV/m)	Margin (dB)	Antenna Pol. (H/V)
5146.500	37.3	-33.0	34.4	35.81	54.0	16.7	Н
5149.500	37.4	-32.9	34.4	35.91	54.0	16.6	Н
10360.500	31.6	-29.8	37.9	23.50	54.0	22.4	Н
15540.400	37.1	-26.3	40.1	23.27	54.0	16.9	Н
16934.100	37.9	-25.7	41.4	22.19	54.0	16.1	Н
17623.800	38.1	-25.9	41.1	22.82	54.0	15.9	Н

#### Channel 40

Fraguency	Meas.	Cable	Antenna	Receiver	Limit	Margin	Antenna	
Frequency	Result	loss	Factor	Reading		_	Pol.	
(MHz)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(dBµV/m)	ιV)   <sup>(αΒμν/Π)</sup>	(dB)	(H/V)
5127.000	36.4	-33.2	34.4	35.12	54.0	17.6	Н	
5217.000	37.5	-32.5	34.4	35.60	54.0	16.5	Н	
10400.100	31.8	-29.6	38.0	23.42	54.0	22.2	Н	
15599.800	37.1	-26.4	40.1	23.32	54.0	16.9	Н	
16955.000	37.9	-25.7	41.4	22.12	54.0	16.1	Н	
17657.900	38.0	-25.5	41.1	22.43	54.0	16.0	Н	

Frequency	Meas.	Cable	Antenna	Receiver	Limit	Margin	Antenna
	Result	loss	Factor	Reading	(dBµV/m)	(dB)	Pol.
(MHz)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	` ' /	(ub)	(H/V)
5353.500	36.6	-31.9	34.6	33.87	54.0	17.4	Н
5371.500	36.7	-32.0	34.6	34.06	54.0	17.3	Н
10480.400	31.6	-30.7	38.1	24.22	54.0	22.4	Н
15719.700	36.7	-26.4	40.2	22.90	54.0	17.3	Н
17640.300	38.0	-25.8	41.1	22.65	54.0	16.0	Н
17945.000	38.1	-24.8	40.8	22.11	54.0	15.9	Н



Frequency	Meas.	Cable	Antenna	Receiver	Limit	Margin	Antenna
	Result	loss	Factor	Reading	(dBµV/m)	•	Pol.
(MHz)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(ασμν/ιιι)	(dB)	(H/V)
5143.500	36.0	-33.0	34.4	34.62	54.0	18.0	Н
5148.000	36.1	-33.0	34.4	34.60	54.0	17.9	Н
10520.000	32.5	-30.9	38.1	25.33	54.0	21.5	Н
15780.000	36.6	-26.3	40.2	22.69	54.0	17.4	Н
16946.200	38.0	-25.7	41.4	22.24	54.0	16.0	Н
17623.800	38.0	-25.9	41.1	22.78	54.0	16.0	Н

## Channel 56

Fraguenay	Meas.	Cable	Antenna	Receiver	Limit	Morgin	Antenna
Frequency (MHz)	Result	loss	Factor	Reading	(dBµV/m)	Margin (dB)	Pol.
(IVITIZ)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(ασμν/ιιι)	(ub)	(H/V)
5215.500	36.8	-32.5	34.4	34.86	54.0	17.2	Н
5334.000	36.6	-31.9	34.5	33.92	54.0	17.4	Н
10559.600	32.7	-30.2	38.1	24.77	54.0	21.3	Н
15839.600	37.5	-26.2	40.3	23.38	54.0	16.5	Н
16979.200	37.8	-25.6	41.4	22.04	54.0	16.2	Н
17649.100	38.0	-25.6	41.1	22.55	54.0	16.0	Н

## Channel 64

Frequency	Meas. Result	Cable loss	Antenna Factor	Receiver Reading	Limit	Margin	Antenna Pol.
(MHz)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(dBµV/m)	(dB)	(H/V)
5362.500	36.6	-31.9	34.6	33.96	54.0	17.4	Н
5374.500	36.7	-32.0	34.6	34.06	54.0	17.3	Н
10639.900	32.5	-29.3	38.2	23.67	54.0	21.5	Н
15959.500	36.7	-25.8	40.5	22.09	54.0	17.3	Н
17030.900	37.7	-25.6	41.4	21.91	54.0	16.3	Н
17943.900	38.2	-24.8	40.8	22.19	54.0	15.8	Н

Fraguanay	Meas.	Cable	Antenna	Receiver	Limit	Margin	Antenna
Frequency	Result	loss	Factor	Reading	(dBµV/m)	•	Pol.
(MHz)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(ασμν/ιιι)	(dB)	(H/V)
5453.602	36.9	-32.0	34.7	34.20	54.0	17.1	Н
5457.621	37.0	-32.0	34.7	34.28	54.0	17.0	Н
11000.150	33.6	-30.2	38.2	25.59	54.0	20.4	Н
16500.150	37.3	-26.0	41.1	22.13	54.0	16.7	Н



17512.700	36.2	-25.4	41.2	20.46	54.0	17.8	Н
17973.050	38.0	-25.2	40.8	22.38	54.0	16.0	Н

Frequency (MHz)	Meas. Result (dBµV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBµV)	Limit (dBµV/m)	Margin (dB)	Antenna Pol. (H/V)
5456.890	36.9	-32.0	34.7	34.22	54.0	17.1	Н
5742.460	36.3	-32.9	34.9	34.36	54.0	17.7	Н
11199.800	33.6	-30.1	38.4	25.33	54.0	20.4	Н
16799.900	35.3	-26.2	41.5	20.02	54.0	18.7	Н
17514.350	37.3	-25.4	41.2	21.55	54.0	16.7	Н
17654.600	38.0	-25.5	41.1	22.48	54.0	16.0	Н

## Channel 140

Frequency (MHz)	Meas. Result (dBµV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBµV)	Limit (dBµV/m)	Margin (dB)	Antenna Pol. (H/V)
5738.560	36.3	-32.9	34.9	34.35	54.0	17.7	Н
5748.690	36.5	-32.9	34.9	34.44	54.0	17.5	Н
11400.000	33.7	-30.2	38.6	25.36	54.0	20.3	Η
17100.200	35.4	-25.5	41.3	19.56	54.0	18.6	Н
17470.350	37.3	-25.2	41.2	21.35	54.0	16.7	Н
17873.500	38.0	-23.9	40.9	21.00	54.0	16.0	Н

## 802.11n-HT20

### Channel 36

Frequency (MHz)	Meas.	Cable	Antenna	Receiver	Limit	Margin	Antenna
	Result	loss	Factor	Reading	(dBµV/m)	(dB)	Pol.
(1711 12)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(αυμν/π)	(ub)	(H/V)
5146.500	36.7	-33.0	34.4	35.26	54.0	17.3	Н
5149.500	36.9	-32.9	34.4	35.44	54.0	17.1	Н
10360.500	31.7	-29.8	37.9	23.57	54.0	22.3	Н
15540.400	37.1	-26.3	40.1	23.36	54.0	16.9	Н
16947.300	37.9	-25.7	41.4	22.13	54.0	16.1	Н
17623.800	38.1	-25.9	41.1	22.87	54.0	15.9	Н

Fraguenay	Meas.	Cable	Antenna	Receiver	Limit	Margin	Antenna
Frequency (MHz)	Result	loss	Factor	Reading	(dBµV/m)	(dB)	Pol.
(IVITZ)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(ασμν/ιιι)	(ub)	(H/V)



5142.000	36.4	-33.0	34.4	35.04	54.0	17.6	Н
5212.500	37.3	-32.5	34.4	35.33	54.0	16.7	Н
10400.100	31.7	-29.6	38.0	23.38	54.0	22.3	Н
15599.800	37.1	-26.4	40.1	23.33	54.0	16.9	Н
16975.900	37.9	-25.6	41.4	22.07	54.0	16.1	Н
17657.900	38.0	-25.5	41.1	22.39	54.0	16.0	Н

Frequency (MHz)	Meas. Result (dBµV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBµV)	Limit (dBµV/m)	Margin (dB)	Antenna Pol. (H/V)
5364.000	36.6	-31.9	34.6	33.96	54.0	17.4	Н
5374.500	36.7	-32.0	34.6	34.07	54.0	17.3	Н
10480.400	31.7	-30.7	38.1	24.26	54.0	22.3	Н
15719.700	36.8	-26.4	40.2	22.95	54.0	17.2	Н
17060.600	37.7	-25.5	41.4	21.84	54.0	16.3	Н
17956.000	38.2	-25.0	40.8	22.31	54.0	15.8	Н

### Channel 52

Frequency	Meas.	Cable	Antenna	Receiver	Limit	Margin	Antenna
Frequency	Result	loss	Factor	Reading		•	Pol.
(MHz)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(dBµV/m)	(dB)	(H/V)
5140.500	36.1	-33.1	34.4	34.71	54.0	17.9	Н
5149.500	36.1	-32.9	34.4	34.65	54.0	17.9	Н
10520.000	32.5	-30.9	38.1	25.26	54.0	21.5	Н
15780.200	36.5	-26.3	40.2	22.56	54.0	17.5	Н
16933.000	37.9	-25.7	41.4	22.13	54.0	16.1	Н
17652.400	38.0	-25.6	41.1	22.47	54.0	16.0	Н

Frequency	Meas.	Cable	Antenna	Receiver	Limit	Margin	Antenna
(MHz)	Result	loss	Factor	Reading	(dBµV/m)	(dB)	Pol.
(IVITIZ)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(ασμν/ιιι)	(ub)	(H/V)
5227.500	36.7	-32.5	34.4	34.76	54.0	17.3	Н
5323.500	36.6	-31.9	34.5	34.03	54.0	17.4	Н
10559.600	32.7	-30.2	38.1	24.75	54.0	21.3	Н
15839.600	37.5	-26.2	40.3	23.37	54.0	16.5	Н
17014.400	37.9	-25.6	41.4	22.05	54.0	16.1	Н
17962.600	38.2	-25.0	40.8	22.40	54.0	15.8	Н



Eroguenov	Meas.	Cable	Antenna	Receiver	Limit	Margin	Antenna
Frequency (MHz)	Result	loss	Factor	Reading	(dBµV/m)	(dB)	Pol.
(IVIIIZ)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(ασμν/ιιι)	(ub)	(H/V)
5364.000	36.7	-31.9	34.6	34.04	54.0	17.3	Н
5371.500	36.7	-32.0	34.6	34.08	54.0	17.3	Н
10639.900	32.5	-29.3	38.2	23.66	54.0	21.5	Н
15959.500	36.7	-25.8	40.5	22.07	54.0	17.3	Н
16980.300	37.8	-25.6	41.4	22.00	54.0	16.2	Н
17657.900	38.0	-25.5	41.1	22.39	54.0	16.0	Н

## Channel 100

Fraguency	Meas.	Cable	Antenna	Receiver	Limit	Morgin	Antenna
1 ' '	Frequency Result loss Fa	Factor	Reading	(dBµV/m)	Margin (dB)	Pol.	
(MHz)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(ασμν/ιιι)	(UD)	(H/V)
5450.045	37.1	-32.0	34.7	34.34	54.0	16.9	Н
5458.421	37.0	-32.0	34.7	34.27	54.0	17.0	Η
11000.000	33.6	-30.2	38.2	25.62	54.0	20.4	Н
16500.000	35.4	-26.0	41.1	20.28	54.0	18.6	Н
17060.620	37.2	-25.5	41.4	21.41	54.0	16.8	Η
17537.450	38.1	-25.5	41.2	22.43	54.0	15.9	Н

## Channel 120

Frequency (MHz)	Meas. Result (dBµV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBµV)	Limit (dBµV/m)	Margin (dB)	Antenna Pol. (H/V)
5453.280	37.1	-32.0	34.7	34.39	54.0	16.9	Н
5729.480	37.2	-33.0	34.9	35.31	54.0	16.8	Η
11200.000	33.6	-30.1	38.4	25.33	54.0	20.4	Н
16800.000	37.2	-26.2	41.5	21.91	54.0	16.8	Н
17564.230	37.5	-25.6	41.1	21.92	54.0	16.5	Η
17064.720	38.2	-25.5	41.3	22.39	54.0	15.8	Н

Frequency	Meas.	Cable	Antenna	Receiver	Limit	Margin	Antenna
	Result	loss	Factor	Reading			Pol.
(MHz)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(dBµV/m)	(dB)	(H/V)
5726.840	36.3	-33.0	34.9	34.35	54.0	17.7	Н
5746.402	36.3	-32.9	34.9	34.30	54.0	17.7	I
11400.000	33.6	-30.2	38.6	25.21	54.0	20.4	Н
17100.000	37.2	-25.5	41.3	21.34	54.0	16.8	Н



16828.570	37.6	-26.1	41.5	22.20	54.0	16.4	Н
17728.360	38.4	-24.3	41.0	21.72	54.0	15.6	Н

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### Channel 38

Fraguenay	Meas.	Cable	Antenna	Receiver	Limit	Margin	Antenna
Frequency (MHz)	Result	loss	Factor	Reading	(dBµV/m)	(dB)	Pol.
(1011 12)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(ασμν/ιιι)	(ub)	(H/V)
5145.000	36.7	-33.0	34.4	35.28	54.0	17.3	Н
5149.500	37.0	-32.9	34.4	35.54	54.0	17.0	Н
10380.300	31.9	-29.7	38.0	23.62	54.0	22.1	Н
15570.100	37.1	-26.3	40.1	23.31	54.0	16.9	Н
16935.200	38.0	-25.7	41.4	22.23	54.0	16.0	Н
17634.800	38.1	-25.9	41.1	22.91	54.0	15.9	Н

### Channel 46

Fraguenay	Meas.	Cable	Antenna	Receiver	Limit	Morgin	Antenna
Frequency	Result	loss	Factor	Reading		Margin	Pol.
(MHz)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(dBµV/m)	(dB)	(H/V)
5367.000	36.7	-32.0	34.6	34.04	54.0	17.3	Н
5373.000	36.6	-32.0	34.6	34.03	54.0	17.4	Н
10459.500	31.7	-30.4	38.1	24.03	54.0	22.3	Н
15690.000	36.7	-26.4	40.2	22.89	54.0	17.3	Н
16962.700	38.0	-25.6	41.4	22.21	54.0	16.0	Н
17650.200	38.0	-25.6	41.1	22.53	54.0	16.0	Н

Frequency (MHz)	Meas. Result (dBµV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBµV)	Limit (dBµV/m)	Margin (dB)	Antenna Pol. (H/V)
5139.000	36.2	-33.1	34.4	34.82	54.0	17.8	Н
5149.500	36.1	-32.9	34.4	34.56	54.0	17.9	Н
10540.000	33.6	-30.5	38.1	26.02	54.0	20.4	Н
15809.900	37.4	-26.3	40.3	23.42	54.0	16.6	Н
16845.600	37.5	-26.0	41.5	22.08	54.0	16.5	Н
17986.400	38.0	-25.4	40.8	22.58	54.0	16.0	Н



Fraguenay	Meas.	Cable	Antenna	Receiver	Limit	Margin	Antenna
Frequency	Result	loss	Factor	Reading	(dBµV/m)	_	Pol.
(MHz)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(ασμν/ιιι)	(dB)	(H/V)
5352.000	40.3	-31.9	34.6	37.64	54.0	13.7	Н
5359.500	38.3	-31.9	34.6	35.60	54.0	15.7	Н
10620.000	34.7	-29.2	38.1	25.67	54.0	19.4	Н
15930.000	37.0	-25.9	40.4	22.54	54.0	17.0	Н
16740.050	37.1	-26.2	41.5	21.82	54.0	16.9	Н
17948.700	38.0	-24.9	40.8	22.06	54.0	16.0	Н

## Channel 102

Fraguenov	Meas.	Cable	Antenna	Receiver	Limit	Morgin	Antenna
Frequency (MHz)	Result	loss	Factor	Reading	(dBµV/m)	Margin (dB)	Pol.
(IVITIZ)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(ασμν/ιιι)	(ub)	(H/V)
5452.402	37.1	-32.0	34.7	34.31	54.0	16.9	Н
5458.400	37.0	-32.0	34.7	34.27	54.0	17.0	Н
11020.000	34.1	-30.4	38.2	26.31	54.0	19.9	Н
16530.000	37.2	-26.0	41.1	22.00	54.0	16.8	Н
17063.902	38.4	-25.5	41.3	22.57	54.0	15.6	Н
17698.050	38.5	-24.8	41.0	22.30	54.0	15.5	Н

## Channel 118

Frequency	Meas.	Cable	Antenna	Receiver	Limit	Margin	Antenna
	Result	loss	Factor	Reading	(dBµV/m)	•	Pol.
(MHz)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(ασμν/ιιι)	(dB)	(H/V)
5456.270	37.1	-32.0	34.7	34.33	54.0	16.9	Н
5740.360	36.4	-32.9	34.9	34.43	54.0	17.6	Н
11180.000	33.7	-30.0	38.3	25.34	54.0	20.3	Н
16770.000	37.2	-26.2	41.5	21.96	54.0	16.8	Н
16669.020	37.7	-26.0	41.4	22.37	54.0	16.3	Н
17639.240	38.2	-25.8	41.1	22.92	54.0	15.8	Н

Frequency (MHz)	Meas. Result (dBµV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBµV)	Limit (dBµV/m)	Margin (dB)	Antenna Pol. (H/V)
5730.020	36.3	-33.0	34.9	34.36	54.0	17.7	Н
5745.623	36.5	-32.9	34.9	34.46	54.0	17.5	Н
11340.000	35.0	-30.3	38.5	26.77	54.0	19.0	Н
17010.000	37.1	-25.6	41.4	21.33	54.0	16.9	Н



17221.240	37.3	-25.8	41.2	21.88	54.0	16.7	Н
17811.350	38.3	-23.0	41.0	20.37	54.0	15.7	Н

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### Channel 36

Frequency (MHz)	Meas.	Cable	Antenna	Receiver	Limit	Margin	Antenna
	Result	loss	Factor	Reading	(dBµV/m)	(dB)	Pol.
(IVII IZ)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(ασμν/ιιι)	(ub)	(H/V)
5146.500	36.8	-33.0	34.4	35.37	54.0	17.2	Н
5149.500	36.9	-32.9	34.4	35.44	54.0	17.1	Н
10360.500	31.7	-29.8	37.9	23.59	54.0	22.3	Н
15540.400	37.1	-26.3	40.1	23.28	54.0	16.9	Н
16936.300	37.9	-25.7	41.4	22.16	54.0	16.1	Н
17646.900	38.0	-25.7	41.1	22.55	54.0	16.0	Н

### Channel 40

Frequency	Meas.	Cable	Antenna	Receiver	Limit	Morgin	Antenna
	Result	loss	Factor	Reading		Margin	Pol.
(MHz)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(dBµV/m)	(dB)	(H/V)
5127.000	36.4	-33.2	34.4	35.11	54.0	17.6	Н
5220.000	37.4	-32.5	34.4	35.48	54.0	16.6	Н
10400.100	31.8	-29.6	38.0	23.41	54.0	22.2	Н
15599.800	37.1	-26.4	40.1	23.31	54.0	16.9	Н
17014.400	37.9	-25.6	41.4	22.06	54.0	16.1	Н
17624.900	38.2	-25.9	41.1	23.01	54.0	15.8	Н

## Channel 48

Frequency (MHz)	Meas. Result	Cable	Antenna Factor	Receiver Reading	Limit (dBµV/m)	Margin (dB)	Antenna Pol.
	(dBµV/m)	(dB)	(dB/m)	(dBµV)			(H/V)
5355.000	36.6	-31.9	34.6	33.89	54.0	17.4	Н
5370.000	36.6	-32.0	34.6	34.02	54.0	17.4	Н
10480.400	31.7	-30.7	38.1	24.24	54.0	22.3	Н
15719.700	36.8	-26.4	40.2	22.94	54.0	17.2	Н
17058.400	37.7	-25.5	41.4	21.88	54.0	16.3	Н
17953.800	38.2	-24.9	40.8	22.30	54.0	15.8	Н

Fraguenay	Meas.	Cable	Antenna	Receiver	Limit	Margin	Antenna
Frequency (MHz)	Result	loss	Factor	Reading	(dBµV/m)	(dB)	Pol.
(IVITZ)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(ασμν/ιιι)	(ub)	(H/V)



5143.500	36.1	-33.0	34.4	34.64	54.0	17.9	Н
5148.000	36.1	-33.0	34.4	34.64	54.0	17.9	Н
10520.000	32.3	-30.9	38.1	25.11	54.0	21.7	Н
15780.200	36.4	-26.3	40.2	22.53	54.0	17.6	Н
16930.800	37.7	-25.7	41.4	22.02	54.0	16.3	Н
17649.100	37.9	-25.6	41.1	22.50	54.0	16.1	Н

Frequency (MHz)	Meas. Result (dBµV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBµV)	Limit (dBµV/m)	Margin (dB)	Antenna Pol. (H/V)
5227.500	36.8	-32.5	34.4	34.89	54.0	17.2	Н
5332.500	36.7	-31.9	34.5	34.06	54.0	17.3	Н
10559.600	32.7	-30.2	38.1	24.74	54.0	21.3	Н
15839.600	37.4	-26.2	40.3	23.31	54.0	16.6	Н
17057.300	37.9	-25.5	41.4	22.03	54.0	16.1	Н
17953.800	38.3	-24.9	40.8	22.40	54.0	15.7	Н

# Channel 64

Frequency	Meas.	Cable	Antenna	Receiver	Limit	Margin	Antenna
	Result	loss	Factor	Reading	(dBµV/m)	•	Pol.
(MHz)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	, , ,	(dB)	(H/V)
5373.000	36.7	-32.0	34.6	34.12	54.0	17.3	Н
5364.000	36.7	-31.9	34.6	34.06	54.0	17.3	Н
10639.900	32.5	-29.3	38.2	23.61	54.0	21.5	Н
15959.500	36.7	-25.8	40.5	22.04	54.0	17.3	Н
17646.900	38.0	-25.7	41.1	22.55	54.0	16.0	Н
17972.500	38.1	-25.2	40.8	22.44	54.0	15.9	Н

Fraguenay	Meas.	Cable	Antenna	Receiver	Limit	Morgin	Antenna
Frequency (MHz)	Result	loss	Factor	Reading	(dBµV/m)	Margin (dB)	Pol.
(IVIIIZ)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(ασμν/ιιι)	(ub)	(H/V)
5453.610	36.9	-32.0	34.7	34.16	54.0	17.1	Н
5456.840	36.8	-32.0	34.7	34.08	54.0	17.2	Н
11000.000	33.5	-30.2	38.2	25.49	54.0	20.5	Н
16500.000	37.2	-26.0	41.1	22.03	54.0	16.8	Н
17734.520	38.1	-24.2	41.0	21.31	54.0	15.9	Н
17826.730	38.2	-23.2	40.9	20.51	54.0	15.8	Н



Frequency (MHz)	Meas. Result (dBµV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBµV)	Limit (dBµV/m)	Margin (dB)	Antenna Pol. (H/V)
5454.830	36.8	-32.0	34.7	34.11	54.0	17.2	Н
5739.602	36.1	-32.9	34.9	34.16	54.0	17.9	Н
11200.000	33.6	-30.1	38.4	25.30	54.0	20.4	Η
16802.100	37.1	-26.2	41.5	21.78	54.0	16.9	Ι
17904.016	37.3	-24.3	40.9	20.65	54.0	16.7	Η
17551.860	38.3	-25.6	41.2	22.71	54.0	15.7	Н

### Channel 140

Frequency	Meas.	Cable	Antenna	Receiver	Limit	Margin	Antenna
	Result	loss	Factor	Reading	(dBµV/m)	Margin (dB)	Pol.
(IVITIZ)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	· · /	(ub)	(H/V)
5729.603	36.1	-33.0	34.9	34.19	54.0	17.9	Н
5744.406	36.3	-32.9	34.9	34.32	54.0	17.7	Ι
11400.000	33.6	-30.2	38.6	25.22	54.0	20.4	Η
17100.000	37.0	-25.5	41.3	21.16	54.0	17.0	Н
16826.320	37.4	-26.1	41.5	22.04	54.0	16.6	H
17987.902	38.4	-25.4	40.8	22.89	54.0	15.7	Н

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### Channel 38

Fraguesay	Meas.	Cable	Antenna	Receiver	Limit	Margin	Antenna
Frequency (MHz)	Result	loss	Factor	Reading	(dBµV/m)	•	Pol.
(IVITIZ)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(ασμν/ιιι)	(dB)	(H/V)
5146.500	36.7	-33.0	34.4	35.26	54.0	17.3	Н
5149.500	37.0	-32.9	34.4	35.55	54.0	17.0	Н
10380.300	32.0	-29.7	38.0	23.71	54.0	22.0	Н
15570.100	37.1	-26.3	40.1	23.35	54.0	16.9	Н
16955.000	38.0	-25.7	41.4	22.18	54.0	16.0	Н
17633.700	38.0	-25.9	41.1	22.76	54.0	16.0	Н

Frequency (MHz)	Meas. Result (dBµV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBµV)	Limit (dBµV/m)	Margin (dB)	Antenna Pol. (H/V)
5368.500	36.6	-32.0	34.6	33.98	54.0	17.4	Н
5373.000	36.6	-32.0	34.6	34.03	54.0	17.4	Н
10459.500	31.7	-30.4	38.1	23.98	54.0	22.3	Н



15690.000	36.7	-26.4	40.2	22.85	54.0	17.3	Н
17014.400	37.9	-25.6	41.4	22.10	54.0	16.1	Н
17657.900	38.0	-25.5	41.1	22.41	54.0	16.0	Н

Frequency	Meas.	Cable	Antenna	Receiver	Limit	Margin	Antenna
(MHz)	Result	loss	Factor	Reading	(dBµV/m)	(dB)	Pol.
(IVIIIZ)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(ασμν/ιιι)	(ub)	(H/V)
5140.500	36.0	-33.1	34.4	37.64	54.0	18.0	Н
5146.500	36.1	-33.0	34.4	35.60	54.0	17.9	Н
10539.800	34.6	-30.5	38.1	25.67	54.0	19.4	Н
15809.900	37.5	-26.3	40.3	22.54	54.0	16.6	Н
16382.000	37.7	-25.7	40.9	21.82	54.0	16.3	Н
17827.050	37.9	-23.2	40.9	22.06	54.0	16.1	Н

## Channel 62

Frequency	Meas.	Cable	Antenna	Receiver	Limit	Margin	Antenna
(MHz)	Result	loss	Factor	Reading	(dBµV/m)	•	Pol.
(IVIF1Z)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(ασμν/ιιι)	(dB)	(H/V)
5364.000	36.6	-31.9	34.6	33.96	54.0	17.4	Н
5370.000	36.6	-32.0	34.6	33.99	54.0	17.4	Н
10620.000	34.7	-29.2	38.1	25.68	54.0	19.3	Н
15930.200	37.7	-25.9	40.4	23.15	54.0	16.4	Н
16889.100	37.8	-25.9	41.4	22.17	54.0	16.2	Н
17524.750	37.9	-25.5	41.2	22.22	54.0	16.1	Н

Frequency	Meas.	Cable	Antenna	Receiver	Limit	Margin	Antenna
Frequency	Result	loss	Factor	Reading	(dBµV/m)	•	Pol.
(MHz)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(ασμν/ιιι)	(dB)	(H/V)
5460.020	36.7	-32.0	34.7	33.97	54.0	17.3	Н
5452.360	36.6	-32.0	34.7	33.91	54.0	17.4	Н
11020.000	33.7	-30.4	38.2	25.88	54.0	20.3	Н
16530.000	37.6	-26.0	41.1	22.39	54.0	16.4	Н
17770.650	37.6	-23.6	41.0	20.26	54.0	16.4	Н
17518.230	38.1	-25.4	41.2	22.38	54.0	15.9	Н



Frequency (MHz)	Meas. Result (dBµV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBµV)	Limit (dBµV/m)	Margin (dB)	Antenna Pol. (H/V)
5455.630	36.7	-32.0	34.7	34.00	54.0	17.3	Н
5729.203	36.1	-33.0	34.9	34.22	54.0	17.9	Н
11180.000	34.7	-30.0	38.3	26.29	54.0	19.4	Н
16770.000	37.2	-26.2	41.5	21.97	54.0	16.8	Н
17924.650	37.3	-24.5	40.9	21.01	54.0	16.7	Н
17440.106	38.1	-25.3	41.2	22.17	54.0	15.9	Н

### Channel 134

Frequency	Meas.	Cable	Antenna	Receiver	Limit	Morgin	Antenna
Frequency (MHz)	Result	loss	Factor	Reading	(dBµV/m)	Margin	Pol.
(IVITZ)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(ασμν/ιιι)	(dB)	(H/V)
5732.800	36.2	-33.0	34.9	34.30	54.0	17.8	Н
5725.520	36.1	-33.0	34.9	34.20	54.0	17.9	Н
11340.000	34.6	-30.3	38.5	26.32	54.0	19.4	Н
17012.000	38.0	-25.6	41.4	22.21	54.0	16.0	Н
16917.800	37.9	-25.8	41.4	22.22	54.0	16.1	Н
17636.105	38.0	-25.8	41.1	22.75	54.0	16.0	Н

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# Channel 42

Frequency Meas.  (MHz) Result	Meas.	Cable	Antenna	Receiver	Limit	Morgin	Antenna
	Result	loss	Factor	Reading	(dBµV/m)	Margin (dB)	Pol.
(IVIIIZ)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(ασμν/ιιι)	(ub)	(H/V)
5129.230	35.9	-33.2	34.4	34.64	54.0	18.1	Н
5142.030	36.1	-33.0	34.4	34.69	54.0	17.9	Н
10420.000	32.4	-29.8	38.0	24.20	54.0	21.6	Н
15630.000	37.1	-26.4	40.2	23.33	54.0	16.9	Н
16894.520	38.0	-25.8	41.4	22.35	54.0	16.0	Н
17632.540	38.0	-25.9	41.1	22.83	54.0	16.0	Н

Eroguenev	Meas.	Cable	Antenna	Receiver	Limit	Morgin	Antenna
Frequency	Result	loss	Factor	Reading		Margin	Pol.
(MHz)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(dBµV/m)	(dB)	(H/V)
5365.204	36.8	-32.0	34.6	34.15	54.0	17.2	Н
5373.260	36.7	-32.0	34.6	34.14	54.0	17.3	Н
10580.000	33.1	-29.8	38.1	24.76	54.0	20.9	Н



15870.000	37.2	-26.1	40.3	22.98	54.0	16.8	Н
16884.970	38.1	-25.9	41.4	22.53	54.0	15.9	Н
17864.390	38.2	-23.7	40.9	21.03	54.0	15.8	Н

Frequency	Meas.	Cable	Antenna	Receiver	Limit	Margin	Antenna
(MHz)	Result	loss	Factor	Reading	(dBµV/m)	(dB)	Pol.
(1011 12)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(ασμν/ιιι)	(ub)	(H/V)
5452.060	37.0	-32.0	34.7	34.28	54.0	17.0	Н
5458.820	37.1	-32.0	34.7	34.41	54.0	16.9	Н
11060.000	33.1	-30.6	38.2	25.46	54.0	20.9	Н
16590.000	37.2	-25.9	41.2	21.87	54.0	16.8	Н
17304.820	38.0	-25.9	41.2	22.69	54.0	16.0	Н
17841.360	38.3	-23.4	40.9	20.83	54.0	15.7	Н

## Channel 155

Frequency	Meas.	Cable	Antenna	Receiver	Limit	Margin	Antenna
(MHz)	Result   loss   Factor	Reading	(dBµV/m)	•	Pol.		
(IVIFIZ)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(ασμν/ιιι)	(dB)	(H/V)
5720.800	37.0	-32.9	34.9	35.05	54.0	17.0	Н
5827.200	37.8	-32.3	35.0	35.10	54.0	16.2	Н
11549.600	32.8	-30.5	38.8	24.51	54.0	21.2	Н
17324.600	36.7	-25.8	41.2	21.29	54.0	17.3	Н
17624.900	37.8	-25.9	41.1	22.59	54.0	16.2	Н
17969.200	37.8	-25.1	40.8	22.15	54.0	16.2	Н

### **PEAK Results:**

802.11a

Channel 36

Frequency (MHz)	Meas. Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBµV)	Limit (dBµV/m)	Margin (dB)	Antenna Pol. (H/V)
5146.840	55.8	-33.0	34.4	54.38	74.0	18.2	Н
5147.620	50.5	-33.0	34.4	49.00	74.0	23.5	Н
10359.950	43.7	-29.8	37.9	35.60	74.0	30.3	V
15539.850	51.7	-26.3	40.1	37.87	74.0	22.3	V
16860.400	55.2	-26.0	41.5	39.72	74.0	18.8	Н
17552.850	55.3	-25.6	41.2	39.70	74.0	18.7	Н

Fre	equency	Meas.	Cable	Antenna	Receiver	Limit	Margin	Antenna	
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(MHz)	Result	loss	Factor	Reading	(dBµV/m)	(dB)	Pol.
	(dBµV/m)	(dB)	(dB/m)	(dBµV)			(H/V)
5152.200	48.1	-32.9	34.4	46.55	74.0	25.9	Η
5205.200	47.8	-32.5	34.4	45.82	74.0	26.2	V
10400.100	44.2	-29.6	38.0	35.87	74.0	29.8	Η
15599.800	51.7	-26.4	40.1	37.88	74.0	22.3	Н
16517.750	54.9	-26.0	41.1	39.73	74.0	19.1	Н
17766.800	55.4	-23.7	41.0	38.15	74.0	18.6	Н

Frequency	Meas.	Cable	Antenna	Receiver	Limit	Morgin	Antenna
Frequency (MHz)	Result	loss	Factor	Reading	(dBµV/m)	Margin (dB)	Pol.
(IVITIZ)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(ασμν/ιιι)	(ub)	(H/V)
5355.600	43.5	-31.9	34.6	40.80	74.0	30.5	Н
5369.600	45.3	-32.0	34.6	42.66	74.0	28.7	Н
10479.850	44.8	-30.6	38.1	37.33	74.0	29.2	V
15720.250	51.0	-26.4	40.2	37.21	74.0	23.0	V
16830.150	54.8	-26.1	41.5	39.37	74.0	19.2	V
17432.400	54.8	-25.3	41.2	38.94	74.0	19.2	V

## Channel 52

Frequency (MHz)	Meas.	Cable	Antenna	Receiver	Limit	Margin	Antenna
	Result	loss	Factor	Reading	(dBµV/m)	(dB)	Pol.
(1711 12)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(αυμν/ιιι)	(GD)	(H/V)
5139.600	43.7	-33.1	34.4	42.36	74.0	30.3	Н
5144.800	43.5	-33.0	34.4	42.09	74.0	30.5	Н
10520.000	44.5	-30.9	38.1	37.29	74.0	29.5	Н
15780.200	51.8	-26.3	40.2	37.92	74.0	22.2	V
16955.000	55.4	-25.7	41.4	39.65	74.0	18.6	V
17952.700	56.0	-24.9	40.8	40.11	74.0	18.0	Н

Eroguenev	Meas.	Cable	Antenna	Receiver	Limit	Margin	Antenna
Frequency	Result	loss	Factor	Reading		•	Pol.
(MHz)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(dBµV/m)	(dB)	(H/V)
5206.000	45.9	-32.5	34.4	43.97	74.0	28.1	Н
5389.400	45.9	-32.1	34.6	43.35	74.0	28.1	Н
10560.150	46.9	-30.2	38.1	38.96	74.0	27.1	V
15840.150	50.8	-26.2	40.3	36.70	74.0	23.2	Н
16792.750	55.7	-26.2	41.5	40.42	74.0	18.3	Н
16955.000	55.3	-25.7	41.4	39.49	74.0	18.7	Н



Fraguenay	Meas.	Cable	Antenna	Receiver	Limit	Margin	Antenna
Frequency (MHz)	Result	loss	Factor	Reading	(dBµV/m)	Margin	Pol.
(IVITZ)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(ασμν/ιιι)	(dB)	(H/V)
5353.765	58.5	-31.9	34.6	55.82	74.0	15.5	V
5359.590	58.2	-31.9	34.6	55.52	74.0	15.8	Н
10639.900	44.9	-29.3	38.2	36.00	74.0	29.2	V
15960.050	52.9	-25.8	40.5	38.22	74.0	21.1	Н
16937.400	55.4	-25.7	41.4	39.64	74.0	18.6	Н
17602.350	55.1	-25.8	41.1	39.74	74.0	18.9	V

## Channel 100

Fraguency	Meas.	Cable	Antenna	Receiver	Limit	Margin	Antenna
Frequency	Result	loss	Factor	Reading	(dBµV/m)	(dB)	Pol.
(MHz)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(ασμν/ιιι)	(ub)	(H/V)
5456.680	52.5	-32.0	34.7	49.75	74.0	21.5	Н
5459.005	52.5	-32.0	34.7	49.77	74.0	21.5	Н
11000.150	46.2	-30.2	38.2	38.19	74.0	27.8	V
16500.150	52.5	-26.0	41.1	37.39	74.0	21.5	V
17512.700	55.9	-25.4	41.2	40.11	74.0	18.1	V
17973.050	55.2	-25.2	40.8	39.57	74.0	18.8	Н

## Channel 120

Eroguenav	Meas.	Cable	Antenna	Receiver	Limit	Morgin	Antenna
Frequency (MHz)	Result	loss	Factor	Reading	(dBµV/m)	Margin (dB)	Pol.
(IVIIIZ)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(ασμν/ιιι)	(ub)	(H/V)
5564.380	48.3	-32.6	34.8	46.08	74.0	25.7	Н
5850.230	46.4	-32.2	35.1	43.54	74.0	27.6	Н
11199.800	45.8	-30.1	38.4	37.50	74.0	28.2	Н
16799.900	52.2	-26.2	41.5	36.88	74.0	21.8	Н
17514.350	54.9	-25.4	41.2	39.07	74.0	19.1	Н
17654.600	55.0	-25.5	41.1	39.45	74.0	19.0	V

Frequency (MHz) Meas. Result (dBµV/m)	Meas.	Cable	Antenna	Receiver	Limit Margii	Morgin	Antenna
	Result	loss	loss   Factor   Reading	Margin	Pol.		
	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(dBµV/m)	(dB)	(H/V)
5735.162	57.5	-33.0	34.9	55.57	74.0	16.5	Н
5740.280	56.1	-32.9	34.9	54.10	74.0	17.9	Н
11400.000	45.6	-30.2	38.6	37.20	74.0	28.4	V



17100.200	52.0	-25.5	41.3	36.13	74.0	22.0	V
17470.350	54.8	-25.2	41.2	38.86	74.0	19.2	Н
17873.500	54.8	-23.9	40.9	37.72	74.0	19.2	Н

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### Channel 36

Frequency (MHz)	Meas. Result (dBµV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBµV)	Limit (dBµV/m)	Margin (dB)	Antenna Pol. (H/V)
5136.500	49.1	-33.1	34.4	47.79	74.0	24.9	Н
5142.550	49.4	-33.0	34.4	47.99	74.0	24.6	Н
10359.950	43.7	-29.8	37.9	35.53	74.0	30.3	Н
15539.850	52.0	-26.3	40.1	38.20	74.0	22.0	Н
16953.900	55.0	-25.7	41.4	39.24	74.0	19.0	Н
17982.400	56.0	-25.3	40.8	40.52	74.0	18.0	V

## Channel 40

Frequency (MHz)	Meas. Result (dBµV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBµV)	Limit (dBµV/m)	Margin (dB)	Antenna Pol. (H/V)
5154.200	48.5	-32.9	34.4	46.91	74.0	25.5	Н
5205.200	47.6	-32.5	34.4	45.64	74.0	26.4	Н
10400.100	45.6	-29.6	38.0	37.21	74.0	28.4	V
15599.800	51.4	-26.4	40.1	37.62	74.0	22.6	V
16478.700	55.2	-26.0	41.1	40.15	74.0	18.8	V
17491.250	55.0	-25.3	41.2	39.10	74.0	19.0	V

Frequency (MHz)	Meas. Result	Cable	Antenna Factor	Receiver Reading	Limit (dBµV/m)	Margin (dB)	Antenna Pol.
,	(dBµV/m)	(dB)	(dB/m)	(dBµV)	( - P )	(- /	(H/V)
5355.800	44.2	-31.9	34.6	41.54	74.0	29.8	Н
5374.600	44.3	-32.0	34.6	41.71	74.0	29.7	Н
10479.850	44.0	-30.6	38.1	36.57	74.0	30.0	V
15720.250	52.2	-26.4	40.2	38.41	74.0	21.8	Н
16801.550	55.7	-26.2	41.5	40.36	74.0	18.3	Н
16879.650	55.9	-25.9	41.4	40.30	74.0	18.1	Н



Eroguonov	Meas.	Cable	Antenna	Receiver	Limit	Margin	Antenna
Frequency (MHz)	Result	loss	Factor	Reading	(dBµV/m)	(dB)	Pol.
(IVIIIZ)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(ασμν/ιιι)	(ub)	(H/V)
5135.400	43.6	-33.1	34.4	42.31	74.0	30.4	Н
5139.600	43.1	-33.1	34.4	41.73	74.0	30.9	V
10520.000	44.5	-30.9	38.1	37.30	74.0	29.5	Н
15780.200	52.2	-26.3	40.2	38.30	74.0	21.8	V
17606.750	55.5	-25.8	41.1	40.17	74.0	18.5	V
17971.400	55.6	-25.2	40.8	39.97	74.0	18.4	V

## Channel 56

Frequency	Meas.	Cable	Antenna	Receiver	Limit	Morgin	Antenna
Frequency (MHz)	Result	loss	Factor	Reading	(dBµV/m)	Margin (dB)	Pol.
(IVITIZ)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(ασμν/ιιι)	(ub)	(H/V)
5227.800	46.2	-32.5	34.4	44.33	74.0	27.8	Н
5360.200	45.5	-31.9	34.6	42.88	74.0	28.5	V
10560.150	45.4	-30.2	38.1	37.38	74.0	28.6	V
15840.150	51.8	-26.2	40.3	37.68	74.0	22.2	V
16372.000	56.5	-25.7	40.8	41.36	74.0	17.5	V
17601.250	55.8	-25.8	41.1	40.40	74.0	18.2	V

Eroguonov	Meas.	Cable	Antenna	Receiver	Limit	Margin	Antenna
Frequency (MHz)	Result	loss	Factor	Reading	(dBµV/m)	•	Pol.
(IVITZ)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(ασμν/ιιι)	(dB)	(H/V)
5351.425	57.9	-31.9	34.6	55.19	74.0	16.1	V
5357.380	57.3	-31.9	34.6	54.59	74.0	16.7	V
10639.900	44.9	-29.3	38.2	36.05	74.0	29.1	Н
15960.050	52.3	-25.8	40.5	37.66	74.0	21.7	Н
17025.400	55.3	-25.6	41.4	39.49	74.0	18.7	Н
17937.850	55.4	-24.7	40.8	39.23	74.0	18.6	Н



Frequency Meas. Result	Meas.	Cable	Antenna	Receiver	Limit	Margin	Antenna
	Result	loss	Factor	Reading	(dBµV/m)	(dB)	Pol.
(MHz)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(ασμν/ιιι)	(ub)	(H/V)
5458.150	51.6	-32.0	34.7	48.85	74.0	22.4	Н
5456.185	51.1	-32.0	34.7	48.42	74.0	22.9	Η
11000.000	49.1	-30.2	38.2	41.11	74.0	24.9	V
16500.000	54.8	-26.0	41.1	39.66	74.0	19.2	Η
17060.620	54.8	-25.5	41.4	38.96	74.0	19.2	V
17537.450	55.7	-25.5	41.2	39.99	74.0	18.3	Н

### Channel 120

Frequency	Meas.	Cable	Antenna	Receiver	Limit	Morgin	Antenna
	Result	loss	Factor	Reading		Margin	Pol.
(MHz)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(dBµV/m)	(dB)	(H/V)
5545.820	48.4	-32.5	34.8	46.06	74.0	25.6	Н
5792.000	48.6	-32.6	35.0	46.30	74.0	25.4	Ι
11200.000	47.2	-30.1	38.4	38.96	74.0	26.8	V
16800.000	54.7	-26.2	41.5	39.36	74.0	19.3	V
17564.230	55.7	-25.6	41.1	40.14	74.0	18.3	V
17064.720	55.4	-25.5	41.3	39.59	74.0	18.6	V

## Channel 140

Frequency (MHz)	Meas. Result (dBµV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBµV)	Limit (dBµV/m)	Margin (dB)	Antenna Pol. (H/V)
5729.660	54.9	-33.0	34.9	52.94	74.0	19.1	Η
5732.640	54.8	-33.0	34.9	52.87	74.0	19.2	Η
11400.000	49.2	-30.2	38.6	40.82	74.0	24.8	Н
17100.000	55.0	-25.5	41.3	39.11	74.0	19.0	V
16828.570	54.7	-26.1	41.5	39.26	74.0	19.3	V
17728.360	55.2	-24.3	41.0	38.50	74.0	18.8	V

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Frequency (MHz)	Meas. Result (dBµV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBµV)	Limit (dBµV/m)	Margin (dB)	Antenna Pol. (H/V)
5128.745	54.1	-33.2	34.4	52.79	74.0	19.9	Н
5143.695	55.8	-33.0	34.4	54.43	74.0	18.2	Н
10379.750	44.0	-29.7	38.0	35.71	74.0	30.0	V



15570.100	51.8	-26.3	40.1	38.02	74.0	22.2	V
16842.800	55.1	-26.0	41.5	39.65	74.0	18.9	V
17562.750	55.6	-25.6	41.1	40.09	74.0	18.4	Н

Frequency	Meas.	Cable	Antenna	Receiver	Limit	Margin	Antenna
(MHz)	Result (dBµV/m)	loss (dB)	Factor (dB/m)	Reading (dBµV)	(dBµV/m)	(dB)	Pol. (H/V)
	(αυμν/ιιι)	(ab)	(GD/III)	(авру)			(11/ / )
5355.400	43.5	-31.9	34.6	40.86	74.0	30.5	Н
5369.600	44.3	-32.0	34.6	41.69	74.0	29.7	Н
10460.050	44.0	-30.4	38.1	36.35	74.0	30.0	V
15690.000	50.8	-26.4	40.2	37.03	74.0	23.2	V
17557.800	55.2	-25.6	41.2	39.68	74.0	18.8	V
17893.850	55.1	-24.1	40.9	38.32	74.0	18.9	V

## Channel 54

Eroguenov	Meas.	Cable	Antenna	Receiver	Limit	Margin	Antenna
Frequency (MHz)	Result	loss	Factor	Reading	(dBµV/m)	(dB)	Pol.
(IVITIZ)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(ασμν/ιιι)	(GD)	(H/V)
5136.400	43.4	-33.1	34.4	42.04	74.0	30.6	Н
5144.400	43.5	-33.0	34.4	42.07	74.0	30.5	Н
10539.800	44.9	-30.5	38.1	37.32	74.0	29.1	V
15809.900	51.3	-26.3	40.3	37.31	74.0	22.7	Н
16895.600	55.3	-25.8	41.4	39.68	74.0	18.7	V
17996.700	55.8	-25.0	40.8	39.96	74.0	18.2	V

### Channel 62

Eroguenov	Meas.	Cable	Antenna	Receiver	Limit	Margin	Antenna
Frequency (MHz)	Result	loss	Factor	Reading	(dBµV/m)	•	Pol.
(IVITIZ)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(ασμν/ιιι)	(dB)	(H/V)
5354.220	59.2	-31.9	34.6	56.51	74.0	14.8	Н
5360.260	60.5	-31.9	34.6	57.81	74.0	13.5	Н
10620.100	45.7	-29.2	38.1	36.70	74.0	28.3	V
15929.800	51.5	-25.9	40.4	36.98	74.0	22.5	V
16840.050	54.8	-26.0	41.5	39.33	74.0	19.2	Н
17952.700	55.5	-24.9	40.8	39.61	74.0	18.5	Н

Fraguenay	Meas.	Cable	Antenna	Receiver	Limit	Margin	Antenna
Frequency (MHz)	Result	loss	Factor	Reading	(dBuV/m)	(dB)	Pol.
(IVITIZ)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(ασμν/ιιι)	(ub)	(H/V)



5458.035	54.0	-32.0	34.7	51.30	74.0	20.0	Н
5458.220	53.6	-32.0	34.7	50.89	74.0	20.4	Н
11020.000	48.8	-30.4	38.2	40.99	74.0	25.2	Н
16530.000	54.3	-26.0	41.1	39.10	74.0	19.7	V
17063.902	55.1	-25.5	41.3	39.22	74.0	19.0	V
17698.050	55.1	-24.8	41.0	38.85	74.0	18.9	V

Frequency	Frequency Meas.	Cable	Antenna	Receiver	Limit	Margin	Antenna
(MHz)	Result	loss	Factor	Reading	(dBµV/m)	(dB)	Pol.
(IVIIIZ)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(ασμν/ιιι)	(ub)	(H/V)
5494.202	46.5	-32.2	34.8	43.89	74.0	27.5	Н
5705.812	45.6	-32.8	34.9	43.50	74.0	28.4	Н
11180.000	49.0	-30.0	38.3	40.65	74.0	25.0	Н
16770.000	55.2	-26.2	41.5	39.93	74.0	18.8	V
16669.020	55.4	-26.0	41.4	40.00	74.0	18.6	V
17639.240	55.1	-25.8	41.1	39.81	74.0	18.9	Н

## Channel 134

Fraguenay	Meas.	Cable	Antenna	Receiver	Limit	Morgin	Antenna
Frequency (MHz)	Result	loss	Factor	Reading		Margin	Pol.
(IVITZ)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(dBµV/m)	(dB)	(H/V)
5725.046	53.9	-33.0	34.9	52.00	74.0	20.1	Н
5732.046	53.3	-33.0	34.9	51.41	74.0	20.7	Н
11340.000	48.7	-30.3	38.5	40.49	74.0	25.3	Н
17010.000	54.4	-25.6	41.4	38.58	74.0	19.6	V
17221.240	55.3	-25.8	41.2	39.80	74.0	18.7	Н
17811.350	55.0	-23.0	41.0	37.05	74.0	19.0	Н

## 802.11ac-HT20

_	Meas.	Cable	Antenna	Receiver	Limit	N.4	Antenna
Frequency	Result	loss	Factor	Reading		Margin	Pol.
(MHz)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(dBµV/m)	(dB)	(H/V)
5139.900	54.1	-33.1	34.4	52.72	74.0	19.9	Н
5146.770	55.0	-33.0	34.4	53.53	74.0	19.0	Н
10359.950	44.7	-29.8	37.9	36.53	74.0	29.3	V
15539.850	51.9	-26.3	40.1	38.14	74.0	22.1	Н
16721.250	55.0	-26.1	41.5	39.65	74.0	19.0	V
17535.250	55.4	-25.5	41.2	39.76	74.0	18.6	٧



Frequency (MHz)	Meas. Result (dBµV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBµV)	Limit (dBµV/m)	Margin (dB)	Antenna Pol. (H/V)
5150.600	48.5	-32.9	34.4	46.99	74.0	25.5	Н
5210.000	48.2	-32.5	34.4	46.29	74.0	25.8	Н
10400.100	45.3	-29.6	38.0	36.95	74.0	28.7	Н
15599.800	51.4	-26.4	40.1	37.65	74.0	22.6	V
16830.700	55.5	-26.1	41.5	40.09	74.0	18.5	V
17641.950	55.7	-25.7	41.1	40.38	74.0	18.3	V

## Channel 48

Frequency Meas.	Meas.	Cable	Antenna	Receiver	Limit	Morgin	Antenna
(MHz)	Result	loss	Factor	Reading	(dBµV/m)	Margin	Pol.
(IVITIZ)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(ασμν/ιιι)	(dB)	(H/V)
5358.000	44.5	-31.9	34.6	41.83	74.0	29.5	V
5365.400	43.9	-32.0	34.6	41.29	74.0	30.1	Н
10479.850	43.9	-30.6	38.1	36.49	74.0	30.1	V
15720.250	51.2	-26.4	40.2	37.40	74.0	22.8	Н
16474.850	55.1	-26.0	41.1	40.04	74.0	18.9	V
17516.550	54.9	-25.4	41.2	39.13	74.0	19.1	V

## Channel 52

Frequency	Meas. Result	Cable loss	Antenna Factor	Receiver Reading	Limit	Margin	Antenna Pol.
(MHz)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(dBµV/m)	(dB)	(H/V)
5125.800	43.2	-33.2	34.4	41.91	74.0	30.8	V
5149.000	42.7	-33.0	34.4	41.21	74.0	31.3	Н
10520.000	44.4	-30.9	38.1	37.20	74.0	29.6	V
15780.200	51.1	-26.3	40.2	37.18	74.0	22.9	Н
17035.300	55.2	-25.6	41.4	39.38	74.0	18.8	V
17945.550	55.2	-24.8	40.8	39.18	74.0	18.8	V

Frequency (MHz)	Meas. Result (dBµV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBµV)	Limit (dBµV/m)	Margin (dB)	Antenna Pol. (H/V)
5222.000	45.0	-32.5	34.4	43.13	74.0	29.0	V
5341.400	45.2	-31.8	34.5	42.52	74.0	28.8	Н
10560.150	45.0	-30.2	38.1	37.02	74.0	29.0	V
15840.150	51.6	-26.2	40.3	37.49	74.0	22.4	Н



17206.350	54.8	-25.7	41.2	39.26	74.0	19.2	Н
17519.850	55.8	-25.4	41.2	40.08	74.0	18.2	V

Frequency	Meas. Result	Cable loss	Antenna Factor	Receiver Reading	Limit	Margin	Antenna Pol.
(MHz)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(dBµV/m)	(dB)	(H/V)
5354.170	57.3	-31.9	34.6	54.63	74.0	16.7	V
5361.675	53.8	-31.9	34.6	51.20	74.0	20.2	Н
10639.900	44.6	-29.3	38.2	35.74	74.0	29.4	Н
15960.050	52.0	-25.8	40.5	37.35	74.0	22.0	V
16980.850	55.6	-25.6	41.4	39.78	74.0	18.4	V
17919.700	55.6	-24.5	40.9	39.20	74.0	18.4	Н

## Channel 100

Frequency (MHz)	Meas. Result (dBµV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBµV)	Limit (dBµV/m)	Margin (dB)	Antenna Pol. (H/V)
5456.830	50.4	-32.0	34.7	47.70	74.0	23.6	Н
5459.475	50.8	-32.0	34.7	48.08	74.0	23.2	Н
11000.000	49.2	-30.2	38.2	41.21	74.0	24.8	V
16500.000	55.0	-26.0	41.1	39.89	74.0	19.0	Н
17734.520	55.1	-24.2	41.0	38.30	74.0	18.9	V
17826.730	55.1	-23.2	40.9	37.38	74.0	18.9	Н

## Channel 120

Frequency (MHz)	Meas. Result (dBµV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBµV)	Limit (dBµV/m)	Margin (dB)	Antenna Pol. (H/V)
5548.800	45.2	-32.5	34.8	42.89	74.0	28.8	H
5684.406	45.2	-32.6	34.9	42.96	74.0	28.8	Н
11200.000	48.9	-30.1	38.4	40.66	74.0	25.1	Н
16800.000	54.6	-26.2	41.5	39.30	74.0	19.4	Н
17951.056	54.5	-24.9	40.8	38.59	74.0	19.5	Н
17558.360	55.0	-25.6	41.2	39.48	74.0	19.0	V

	Meas.	Cable	Antenna	Receiver	Limit	Morgin	Antenna
Frequency	Result	loss	Factor	Reading	Limit	Margin	Pol.
(MHz)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(dBµV/m)	(dB)	(H/V)
5736.940	53.5	-32.9	34.9	51.53	74.0	20.5	Н



5739.245	53.8	-32.9	34.9	51.82	74.0	20.2	Н
11400.000	49.9	-30.2	38.6	41.53	74.0	24.1	V
17100.000	54.7	-25.5	41.3	38.90	74.0	19.3	V
16826.320	55.1	-26.1	41.5	39.73	74.0	18.9	V
17987.902	55.7	-25.4	40.8	40.19	74.0	18.3	V

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### Channel 38

Frequency	Meas.	Cable	Antenna	Receiver	Limit	Margin	Antenna
(MHz)	Result	loss	Factor	Reading	(dBµV/m)	(dB)	Pol.
(1711 12)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(dDp v/iii)	(GD)	(H/V)
5145.870	57.8	-33.0	34.4	56.38	74.0	16.2	Н
5148.065	53.8	-33.0	34.4	52.34	74.0	20.2	Н
10379.750	44.8	-29.7	38.0	36.51	74.0	29.2	Н
15570.100	50.2	-26.3	40.1	36.43	74.0	23.8	V
16487.500	54.8	-26.0	41.1	39.75	74.0	19.2	V
17077.650	54.8	-25.5	41.3	39.00	74.0	19.2	V

### Channel 46

Frequency	Meas.	Cable	Antenna	Receiver	Limit	Margin	Antenna
	Result	loss	Factor	Reading	(dBµV/m)	(dB)	Pol.
(MHz)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(ασμν/ιιι)	(ub)	(H/V)
5353.400	44.2	-31.9	34.6	41.52	74.0	29.8	Н
5367.800	44.7	-32.0	34.6	42.06	74.0	29.3	Н
10460.050	44.5	-30.4	38.1	36.79	74.0	29.5	V
15690.000	50.5	-26.4	40.2	36.71	74.0	23.5	Н
16509.500	55.6	-26.0	41.1	40.48	74.0	18.4	V
17624.900	55.5	-25.9	41.1	40.27	74.0	18.5	Н

Frequency (MHz)	Meas. Result (dBµV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBµV)	Limit (dBµV/m)	Margin (dB)	Antenna Pol. (H/V)
5139.600	44.1	-33.1	34.4	42.69	74.0	29.9	Н
5145.000	43.0	-33.0	34.4	41.57	74.0	31.0	V
10539.800	45.3	-30.5	38.1	37.69	74.0	28.7	Н
15809.900	52.5	-26.3	40.3	38.54	74.0	21.5	Н
16381.350	55.2	-25.7	40.9	40.04	74.0	18.8	Н
17621.050	56.1	-25.8	41.1	40.85	74.0	17.9	Н



Frequency	Meas.	Cable	Antenna	Receiver	Limit	Margin	Antenna
(MHz)	Result	loss	Factor	Reading	(dBµV/m)	_	Pol.
(IVIIIZ)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(ασμν/ιιι)	(dB)	(H/V)
5353.235	51.8	-31.9	34.6	49.09	74.0	22.2	V
5362.425	52.2	-31.9	34.6	49.52	74.0	21.8	Н
10620.100	45.7	-29.2	38.1	36.70	74.0	28.3	V
15929.800	52.1	-25.9	40.4	37.57	74.0	21.9	Н
16899.450	55.1	-25.8	41.4	39.50	74.0	18.9	Н
17564.950	55.5	-25.6	41.1	39.98	74.0	18.5	V

## Channel 102

Frequency	Meas.	Cable	Antenna	Receiver	Limit	Morgin	Antenna
	Result	loss	Factor	Reading	(dBµV/m)	Margin (dB)	Pol.
(MHz)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(ασμν/ιιι)	(ub)	(H/V)
5459.140	51.2	-32.0	34.7	48.52	74.0	22.8	Н
5458.650	50.9	-32.0	34.7	48.20	74.0	23.1	Н
11020.000	48.2	-30.4	38.2	40.42	74.0	25.8	Н
16530.000	53.9	-26.0	41.1	38.75	74.0	20.1	V
17770.650	55.5	-23.6	41.0	38.13	74.0	18.5	V
17518.230	55.3	-25.4	41.2	39.53	74.0	18.7	Н

## Channel 118

Frequency	Meas.	Cable	Antenna	Receiver	Limit	Margin	Antenna
	Result	loss	Factor	Reading		•	Pol.
(MHz)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(dBµV/m)	(dB)	(H/V)
5523.802	46.3	-32.4	34.8	43.84	74.0	27.7	Н
5643.840	47.3	-32.6	34.9	44.98	74.0	26.7	Н
11180.000	48.9	-30.0	38.3	40.55	74.0	25.1	V
16770.000	54.3	-26.2	41.5	39.04	74.0	19.7	Н
17924.650	55.0	-24.5	40.9	38.66	74.0	19.0	Н
17440.106	54.9	-25.3	41.2	38.98	74.0	19.1	Н

Frequency (MHz)	Meas. Result (dBµV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBµV)	Limit (dBµV/m)	Margin (dB)	Antenna Pol. (H/V)
5727.440	51.2	-33.0	34.9	49.24	74.0	22.9	H
5732.800	51.7	-33.0	34.9	49.72	74.0	22.3	Н
11340.000	48.9	-30.3	38.5	40.71	74.0	25.1	Н
17010.000	53.9	-25.6	41.4	38.12	74.0	20.1	V



16919.800	55.5	-25.7	41.4	39.86	74.0	18.5	Н
17638.105	55.1	-25.8	41.1	39.79	74.0	18.9	Н

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### Channel 42

Frequency	Meas. Result	Cable loss	Antenna Factor	Receiver Reading	Limit	Margin	Antenna Pol.
(MHz)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(dBµV/m) (dB)		(H/V)
5146.845	53.8	-33.0	34.4	52.36	74.0	20.2	Н
5149.045	54.2	-33.0	34.4	52.75	74.0	19.8	Н
10420.000	48.1	-29.8	38.0	39.90	74.0	25.9	Н
15630.000	54.2	-26.4	40.2	40.43	74.0	19.8	V
17967.550	55.3	-25.1	40.8	39.61	74.0	18.7	Н
16254.386	54.8	-25.4	40.6	39.60	74.0	19.2	Н

### Channel 58

Eroguenov	Meas.	Cable	Antenna	Receiver	Limit	Margin	Antenna
Frequency (MHz)	Result	loss	Factor	Reading	(dBµV/m)	Margin	Pol.
(IVIIIZ)	(dBµV/m)	(dB)	(dB/m)	(dBµV)	(ασμν/ιιι)	(dB)	(H/V)
5352.250	50.6	-31.9	34.6	47.92	74.0	23.4	Н
5354.715	50.4	-31.9	34.6	47.73	74.0	23.6	Н
10580.000	48.2	-29.8	38.1	39.87	74.0	25.8	Н
15870.000	54.3	-26.1	40.3	40.10	74.0	19.7	Н
17645.823	55.5	-25.7	41.1	40.12	74.0	18.5	Н
17054.580	54.9	-25.5	41.4	39.06	74.0	19.1	V

## Channel 106

Frequency (MHz)	Meas. Result (dBµV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBµV)	Limit (dBµV/m)	Margin (dB)	Antenna Pol. (H/V)
5457.915	49.4	-32.0	34.7	46.71	74.0	24.6	Н
5456.875	48.6	-32.0	34.7	45.89	74.0	25.4	Н
11060.000	49.2	-30.6	38.2	41.56	74.0	24.8	V
16590.000	53.9	-25.9	41.2	38.62	74.0	20.1	V
17415.960	55.0	-25.4	41.2	39.12	74.0	19.0	Н
16909.356	55.2	-25.8	41.4	39.51	74.0	18.8	Н

Fraguenay	Meas.	Cable	Antenna	Receiver	Limit	Margin	Antenna
Frequency (MHz)	Result	loss	Factor	Reading	(dBµV/m)	(dB)	Pol.
	(dBµV/m)	(dB)	(dB/m)	(dBµV)			(H/V)



5715.800	46.3	-32.9	34.9	44.31	74.0	27.7	Н
5846.400	46.5	-32.2	35.1	43.63	74.0	27.5	Н
11550.150	46.7	-30.5	38.8	38.41	74.0	27.3	<b>V</b>
17325.150	52.9	-25.8	41.2	37.50	74.0	21.1	Н
17626.000	54.9	-25.9	41.1	39.66	74.0	19.1	V
17965.350	54.7	-25.1	40.8	38.94	74.0	19.3	Н

## A.7. Spurious Emissions Radiated (150kHz- 30MHz)

#### **Test Condition:**

Voltage (V)	Frequency (Hz)
110	60

#### Measurement uncertainty:

Expanded measurement uncertainty for this test item is U =3.2dB, k=2.

#### Measurement Result and limit:

WLAN (Quasi-peak Limit)

Frequency range	Quasi-peak	Result (		Conclusion
(MHz)	Limit (dBμV)	11a mode	ldle	
0.15 to 0.5	66 to 56			
0.5 to 5	56	Fig.69	Fig.70	Р
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)

TIES III (S ITOTAGO EIII)	,			
Frequency range	Average Limit	Result (		
		With ch	Conclusion	
(MHz)	(dB <sub>μ</sub> V)	11a mode	Idle	
0.15 to 0.5	56 to 46			
0.5 to 5	46	Fig. 69	Fig. 70	Р
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:



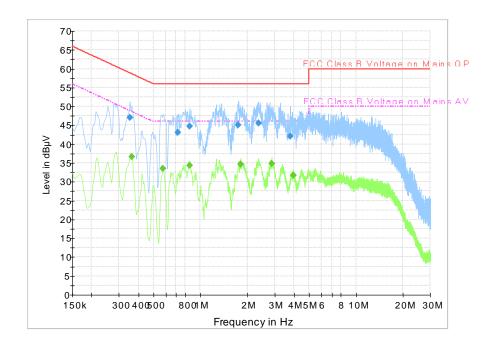


Fig. 69 Conducted Emission(802.11a, Ch40, TX)

## **Final Result 1**

Frequenc	QuasiPe	Meas	Bandwidt	Filte	Lin	Corr	Margi	Limit	Comme
у	ak	-	h	r	е		n	(dBµ	nt
(MHz)	(dBµV)	Time	(kHz)			(dB)	(dB)	V)	
0.352500	47.0	2000	9.000	On	L1	19.8	11.9	58.9	
0.717000	43.1	2000	9.000	On	L1	19.8	12.9	56.0	
0.852000	44.8	2000	9.000	On	L1	19.7	11.2	56.0	
1.756500	45.1	2000	9.000	On	L1	19.7	10.9	56.0	
2.359500	45.5	2000	9.000	On	L1	19.7	10.5	56.0	
3.795000	42.0	2000	9.000	On	L1	19.6	14.0	56.0	

# Final Result 2

Frequenc	Averag	Meas	Bandwidt	Filter	Line	Corr	Margi	Limit	Commen
у	е	-	h				n	(dBµ	t
(MHz)	(dBµV)	Time	(kHz)			(dB)	(dB)	V)	
0.361500	36.6	2000.	9.000	On	L1	19.8	12.1	48.7	
0.573000	33.6	2000.	9.000	On	L1	19.9	12.4	46.0	
0.852000	34.3	2000.	9.000	On	L1	19.7	11.7	46.0	
1.819500	34.6	2000.	9.000	On	L1	19.7	11.4	46.0	
2.881500	34.8	2000.	9.000	On	L1	19.7	11.2	46.0	
3.948000	31.7	2000.	9.000	On	L1	19.6	14.3	46.0	



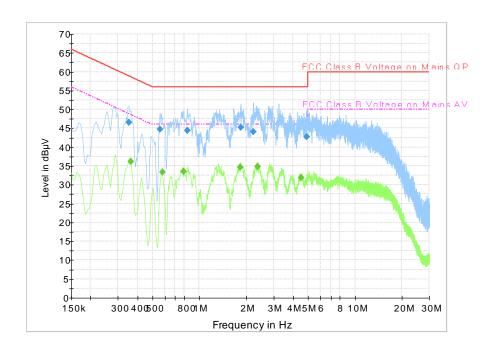


Fig. 70 Conducted Emission(802.11a, IDLE)

## **Final Result 1**

Frequenc	QuasiPe	Meas	Bandwidt	Filte	Lin	Corr	Margi	Limit	Comme
у	ak		h	r	е		n	(dBµ	nt
(MHz)	(dBµV)	Time	(kHz)			(dB)	(dB)	V)	
0.352500	46.6	2000	9.000	On	L1	19.8	12.3	58.9	
0.559500	44.7	2000	9.000	On	L1	19.9	11.3	56.0	
0.834000	44.3	2000	9.000	On	L1	19.7	11.7	56.0	
1.855500	45.2	2000	9.000	On	L1	19.7	10.8	56.0	
2.211000	44.1	2000	9.000	On	L1	19.7	11.9	56.0	
4.888500	42.7	2000	9.000	On	L1	19.6	13.3	56.0	

# Final Result 2

Frequenc	Averag	Meas	Bandwidt	Filter	Line	Corr	Margi	Limit	Comme
У	е		h				n	(dBµ	nt
(MHz)	(dBµV)	Time	(kHz)			(dB)	(dB)	V)	
0.361500	36.2	2000.	9.000	On	L1	19.8	12.5	48.7	
0.577500	33.4	2000.	9.000	On	L1	19.9	12.6	46.0	
0.793500	33.5	2000.	9.000	On	L1	19.7	12.5	46.0	
1.837500	34.7	2000.	9.000	On	L1	19.7	11.3	46.0	
2.377500	34.8	2000.	9.000	On	L1	19.7	11.2	46.0	
4.506000	31.8	2000.	9.000	On	L1	19.6	14.2	46.0	



### A.8. 99% Occupied bandwidth

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

- a) The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.
- b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be approximately three times the RBW, unless otherwise specified by the applicable requirement.
- c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope 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	Channel	99% Occupie ( N	conclusion	
	5180 MHz	Fig.71	16.65	Р
802.11a	5200 MHz	Fig.72	16.68	Р
	5240 MHz	Fig.73	16.66	Р
000 11 n	5180 MHz	Fig.74	17.84	Р
802.11n HT20	5200 MHz	Fig.75	17.85	Р
П120	5240 MHz	Fig.76	17.83	Р
000 11 00	5180 MHz	Fig.77	17.90	Р
802.11ac HT20	5200 MHz	Fig.78	17.85	Р
HIZU	5240 MHz	Fig.79	17.73	Р
802.11n	5190 MHz	Fig.80	36.22	Р
HT40	5230 MHz	Fig.81	36.18	Р
802.11ac	5190 MHz	Fig.82	36.21	Р



HT40	5230 MHz	Fig.83	36.13	Р
802.11ac	5040 MU-	Fig. 0.4	75.04	D
HT80	5210 MHz	Fig.84	75.81	۲

Conclusion: PASS
Test graphs as below:

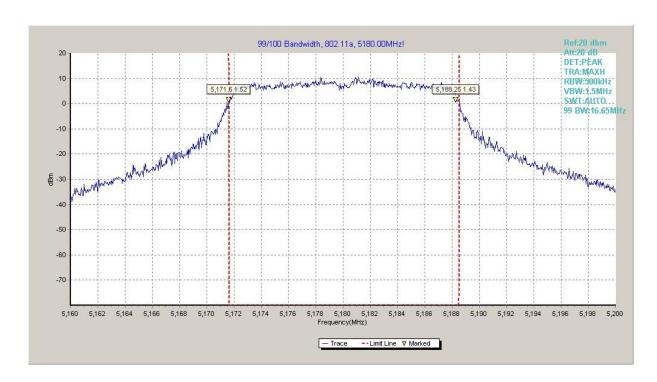


Fig. 71 99% Occupied bandwidth (802.11a, 5180MHz)



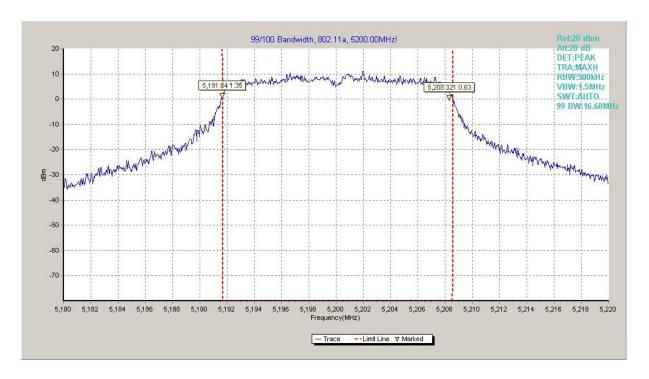


Fig. 72 99% Occupied bandwidth (802.11a, 5200MHz)

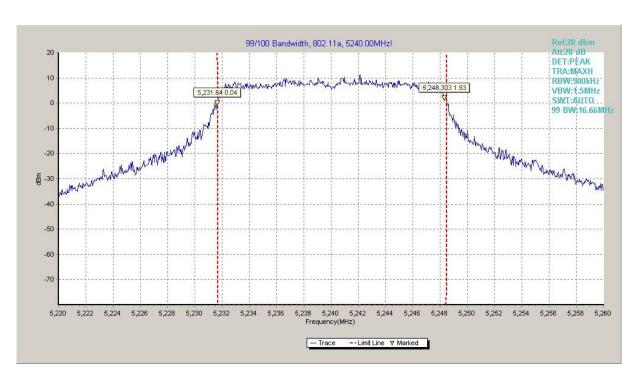


Fig. 73 99% Occupied bandwidth (802.11a, 5240MHz)



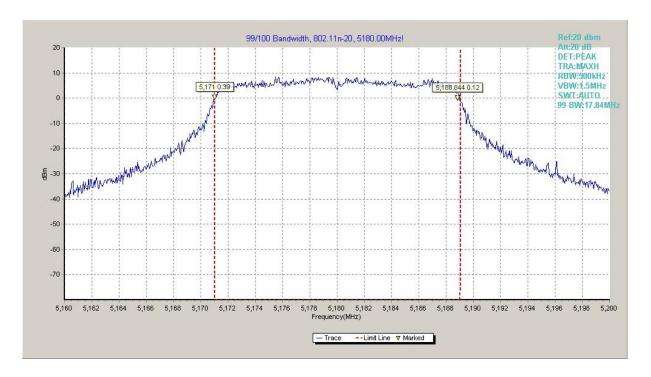


Fig. 74 99% Occupied bandwidth (802.11n-HT20, 5180MHz)

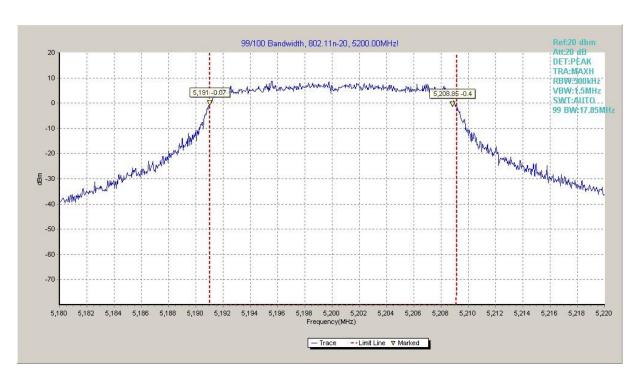


Fig. 75 99% Occupied bandwidth (802.11n-HT20, 5200MHz)



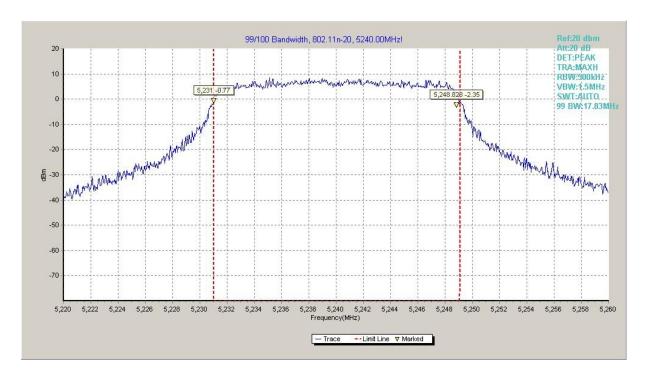


Fig. 76 99% Occupied bandwidth (802.11n-HT20, 5240MHz)

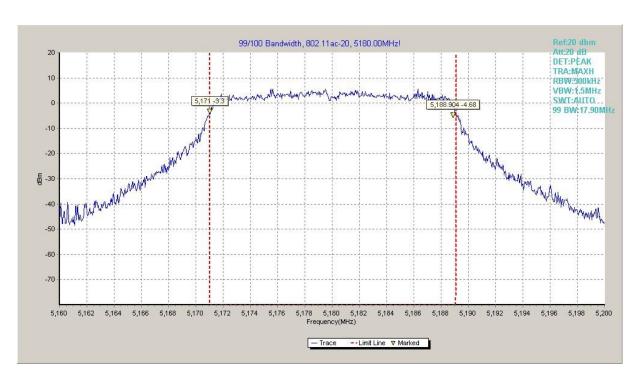


Fig. 77 99% Occupied bandwidth (802.11ac-HT20, 5180MHz)



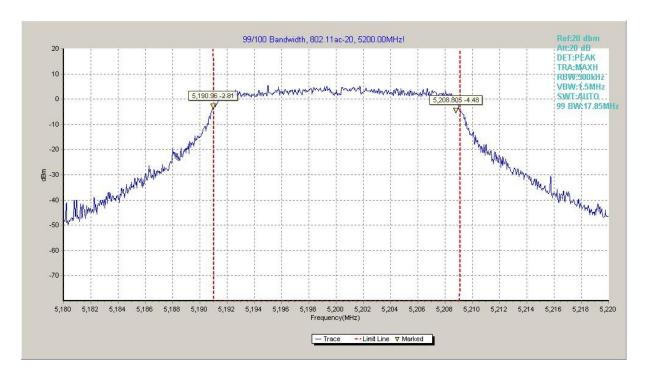


Fig. 78 99% Occupied bandwidth (802.11ac-HT20, 5200MHz)

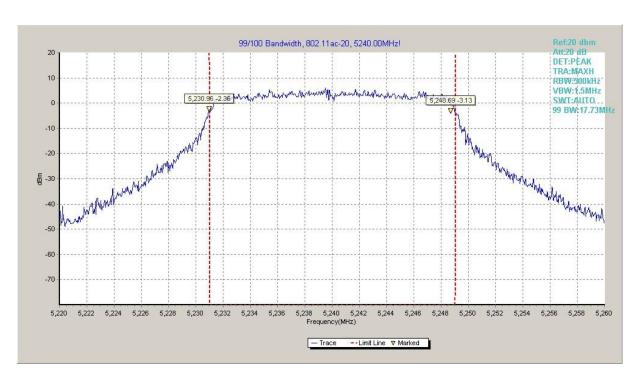


Fig. 79 99% Occupied bandwidth (802.11ac-HT20, 5240MHz)



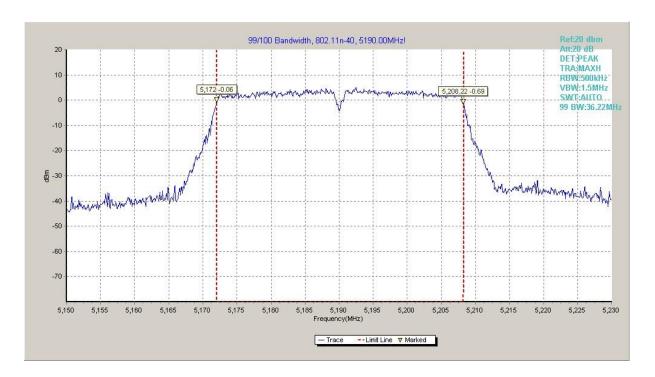


Fig. 80 99% Occupied bandwidth (802.11n-HT40, 5190MHz)

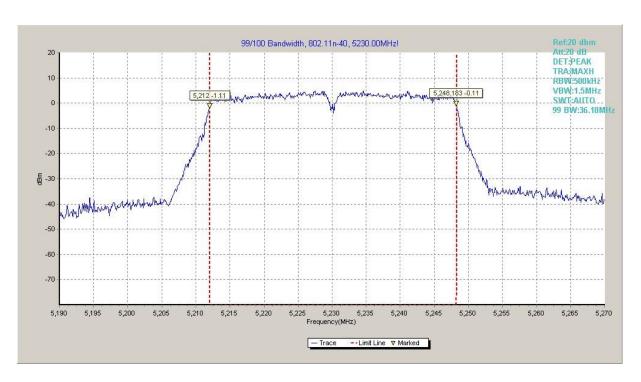


Fig. 81 99% Occupied bandwidth (802.11n-HT40, 5230MHz)



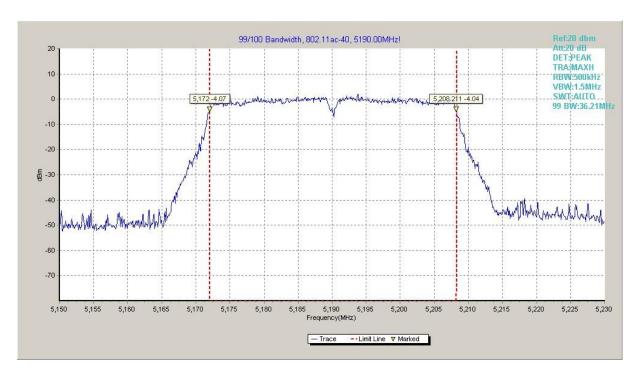


Fig. 82 99% Occupied bandwidth (802.11ac-HT40, 5190MHz)

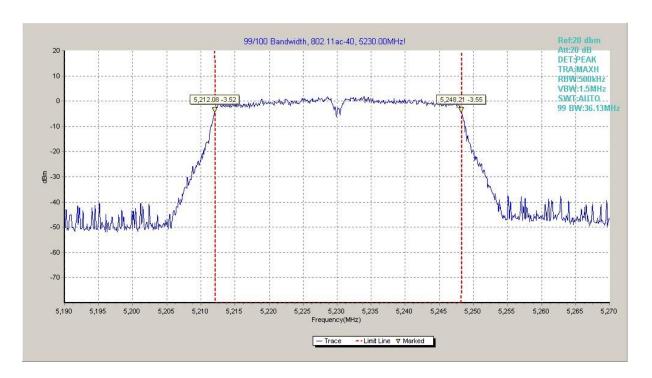


Fig. 83 99% Occupied bandwidth (802.11ac-HT40, 5230MHz)



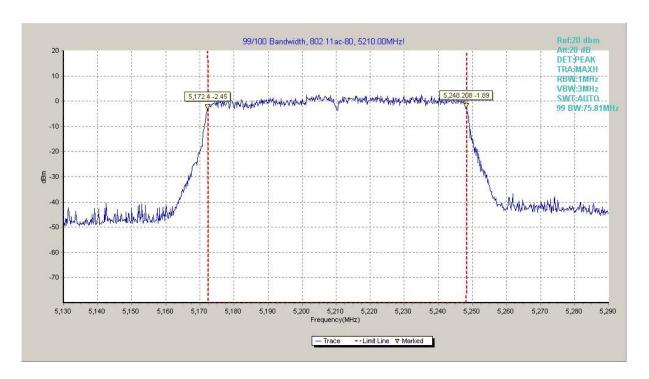


Fig. 84 99% Occupied bandwidth (802.11ac-HT80, 5210MHz)



## A.9. Frequency Stability

Manufacturers ensured the EUT meet the requirement of frequency stability, such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

#### **Measurement Result:**

Mode	Channel	Test Condition		Result(MHz)
		Tnom	Vnom	
		Tmax	Vnom	
802.11a	5180MHz	Tmin	Vnom	0.04
		Vmax	Tnom	
		Vmin	Tnom	
	5320MHz	Tnom	Vnom	
		Tmax	Vnom	
802.11ac-HT20		Tmin	Vnom	0.04
		Vmax	Tnom	
		Vmin	Tnom	
		Tnom	Vnom	
		Tmax	Vnom	
802.11n-HT40	5570MHz	Tmin	Vnom	0.04
		Vmax	Tnom	
		Vmin	Tnom	

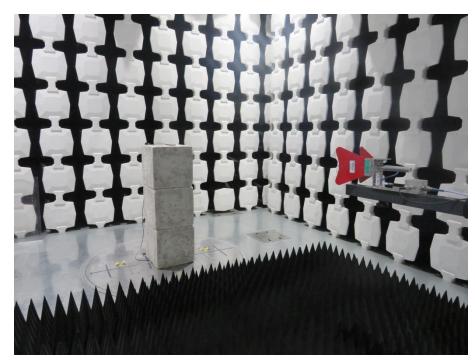
#### A.10. Power control

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



# ANNEX B: PHOTOGRAPHS OF THE TEST SET-UP

**Layout of Radiated Spurious Emission Test** 







### **ANNEX C: Accreditation Certificate**

United States Department of Commerce National Institute of Standards and Technology



# Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 600118-0

### **Telecommunication Technology Labs, CAICT**

Beijing China

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

#### **Electromagnetic Compatibility & Telecommunications**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2016-09-29 through 2017-09-30

Effective Dates



For the National Voluntary Laboratory Accreditation Program

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