

Fig. 33 Occupied 26dB Bandwidth (802.11n40, 5550MHz)

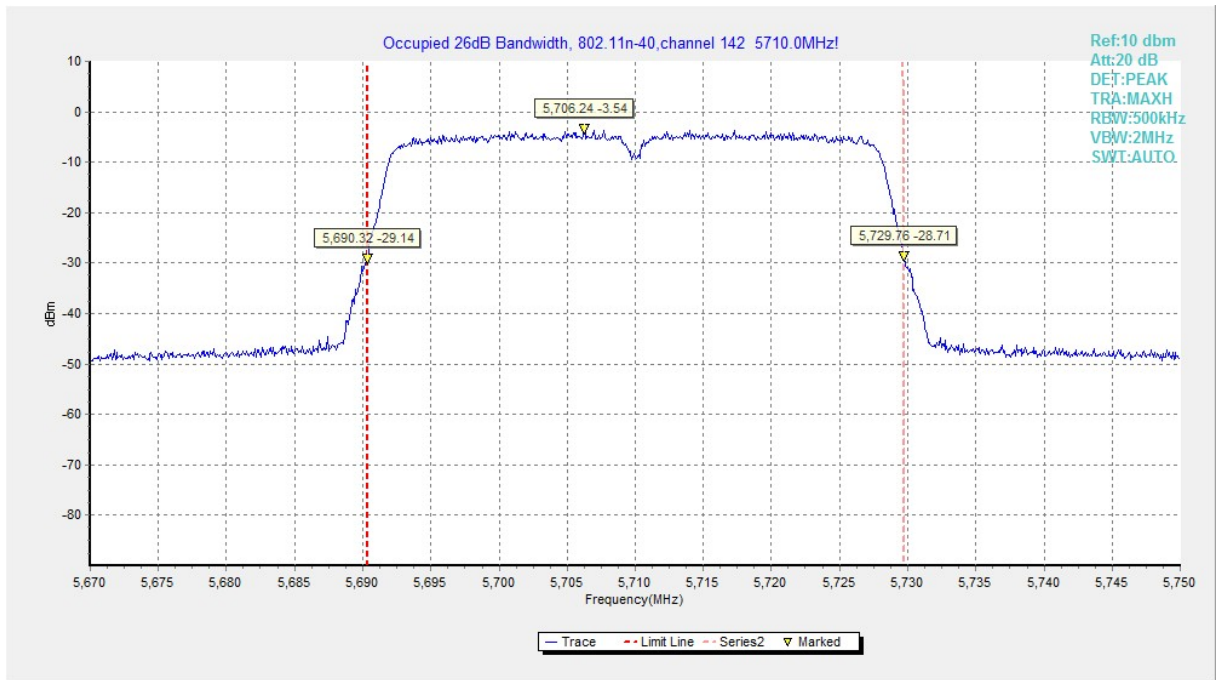
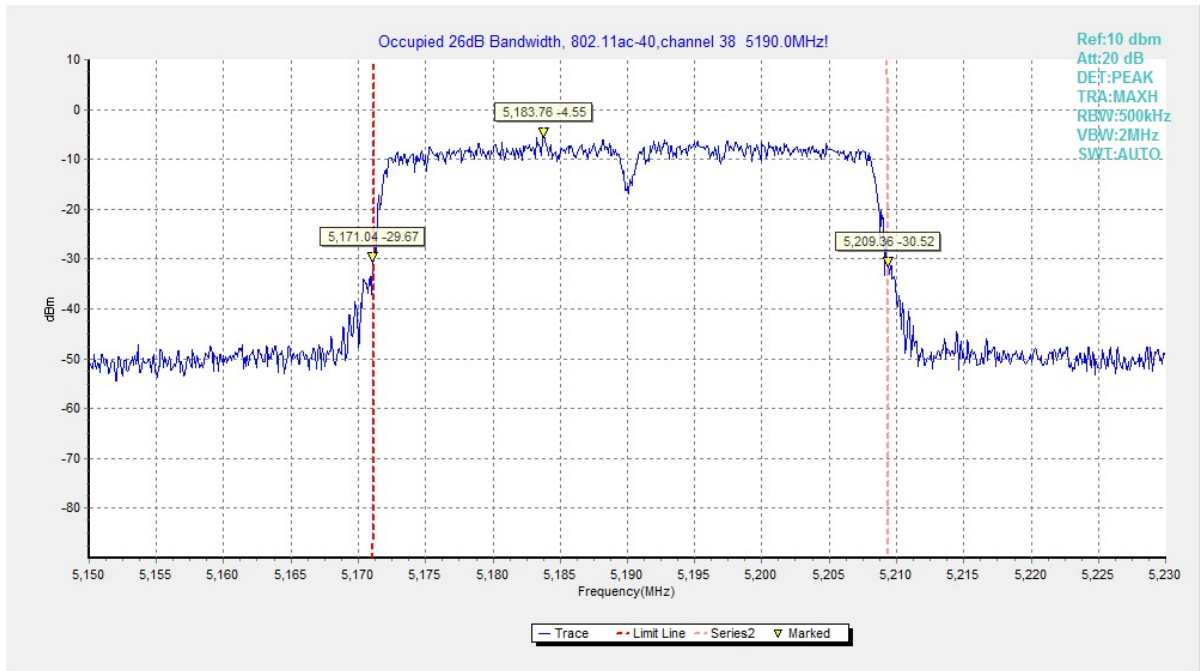
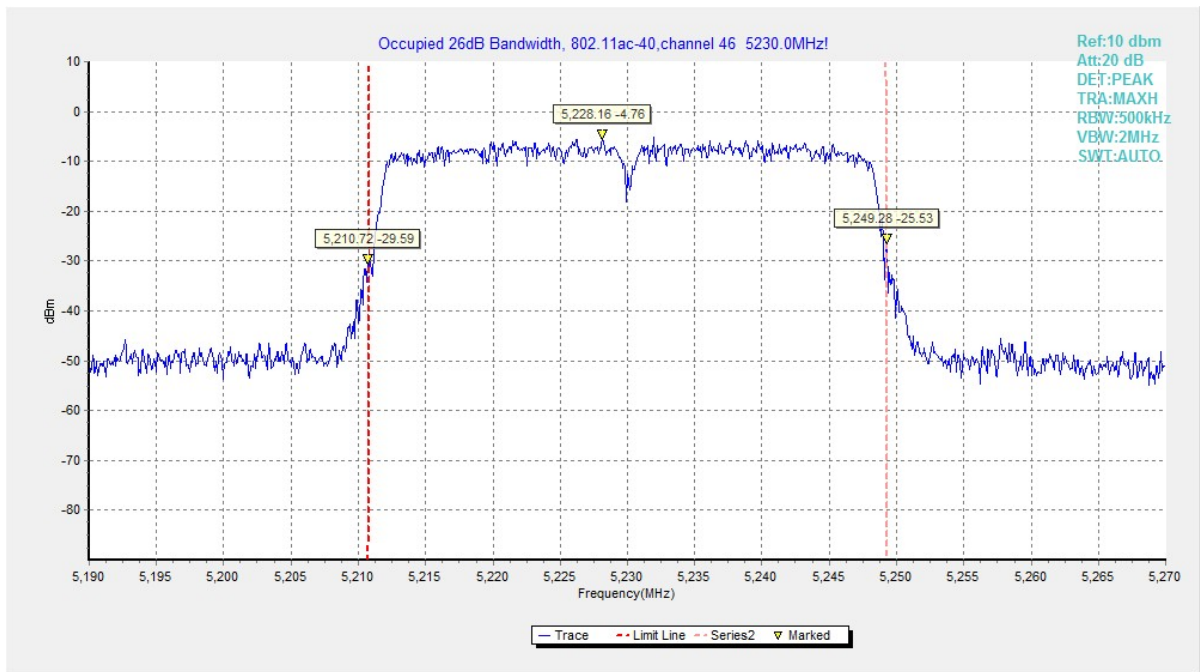


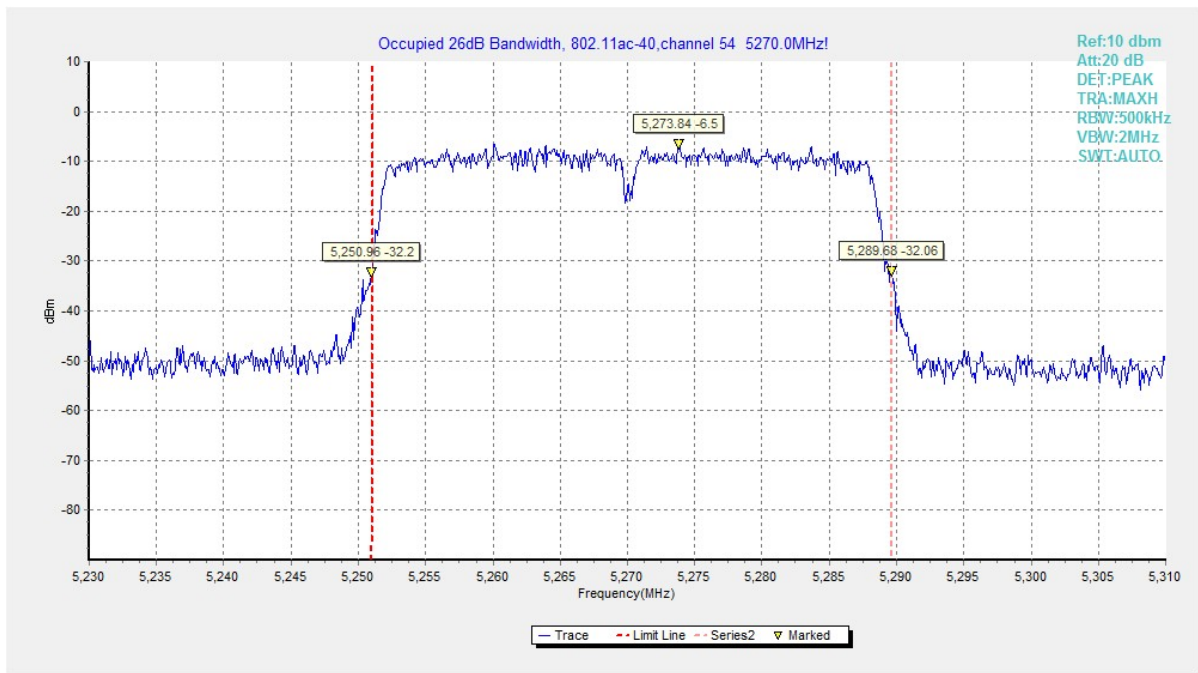
Fig. 34 Occupied 26dB Bandwidth (802.11n40, 5710MHz)



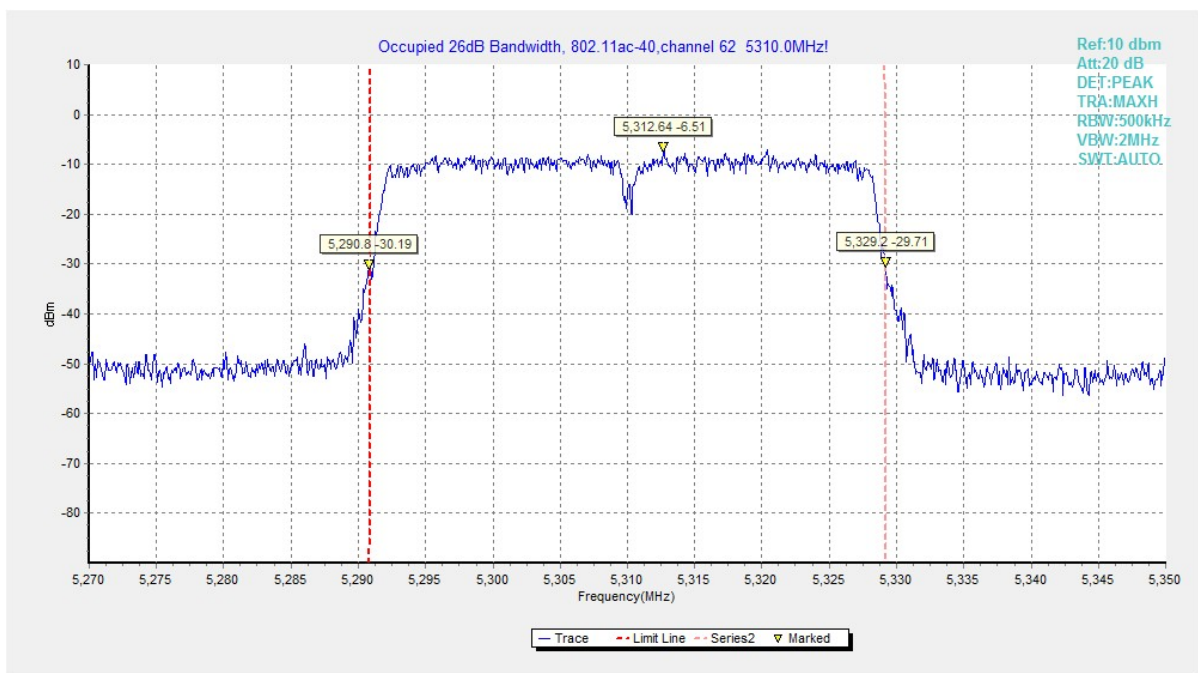
**Fig. 35 Occupied 26dB Bandwidth (802.11ac40, 5190MHz)**



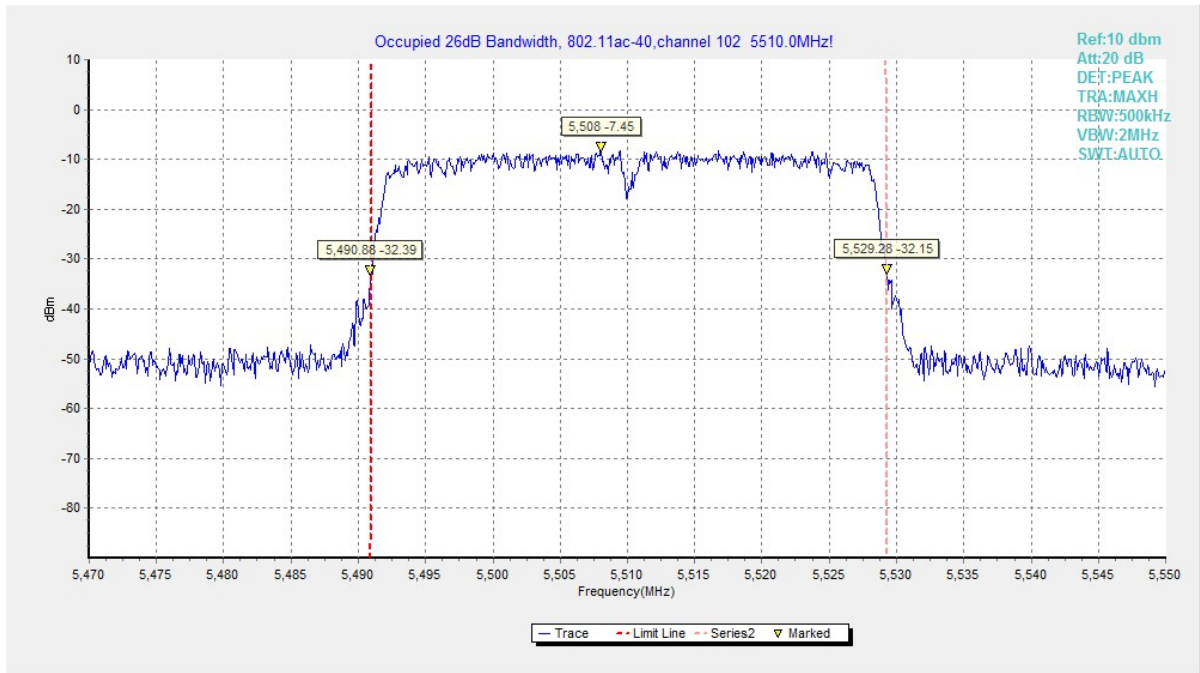
**Fig. 36 Occupied 26dB Bandwidth (802.11ac40, 5230MHz)**



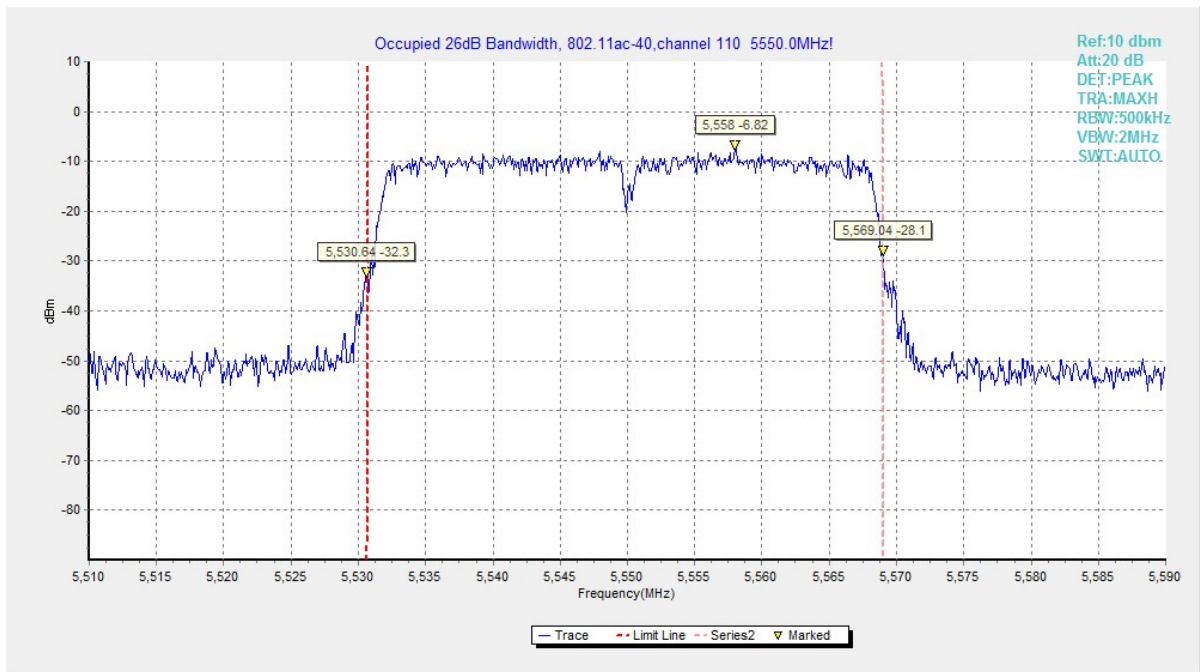
**Fig. 37 Occupied 26dB Bandwidth (802.11ac40, 5270MHz)**



**Fig. 38 Occupied 26dB Bandwidth (802.11ac40, 5310MHz)**

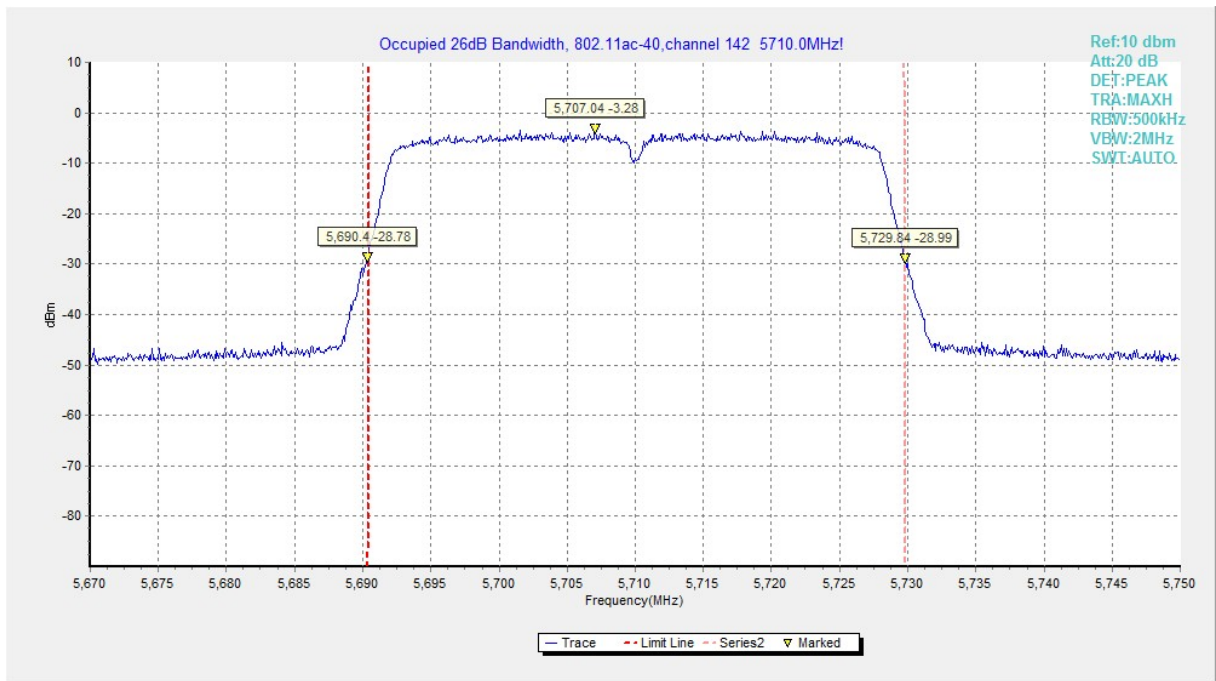


**Fig. 39 Occupied 26dB Bandwidth (802.11ac40, 5510MHz)**

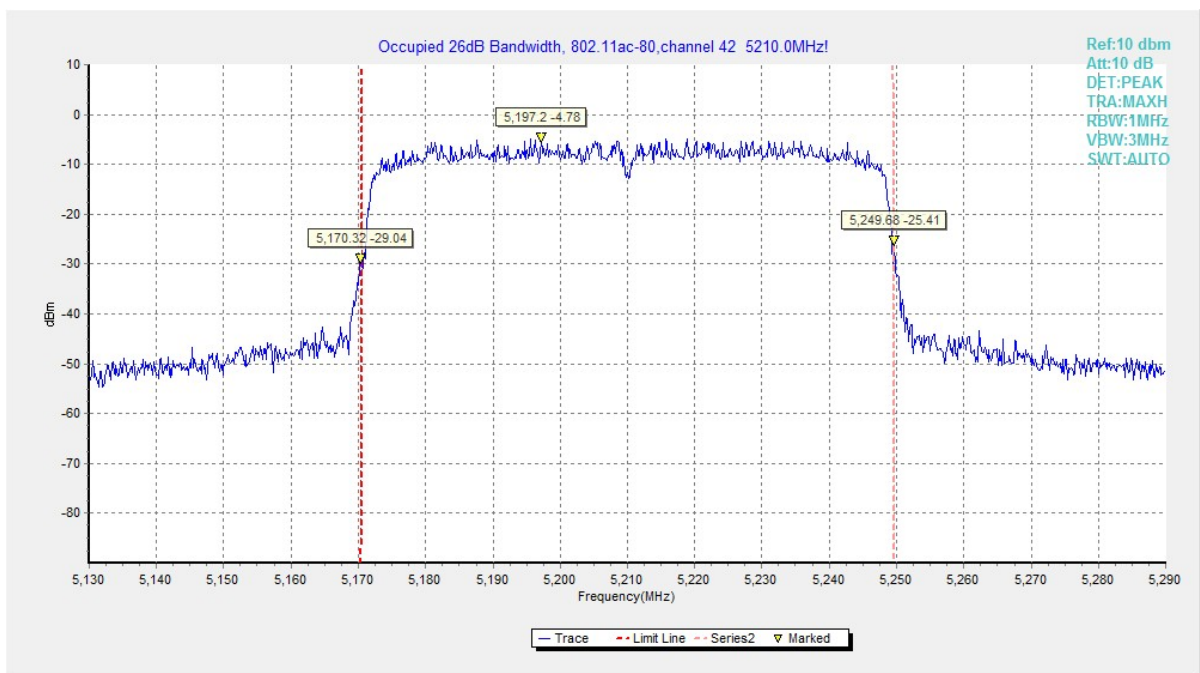


**Fig. 40 Occupied 26dB Bandwidth (802.11ac40, 5550MHz)**

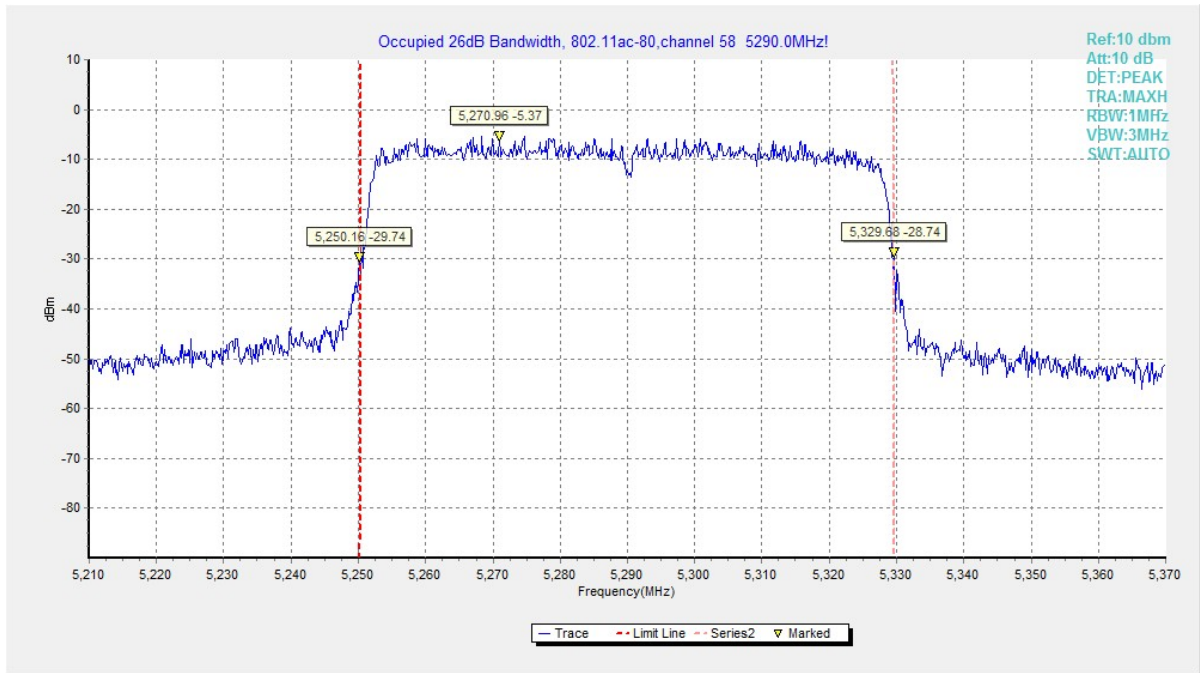




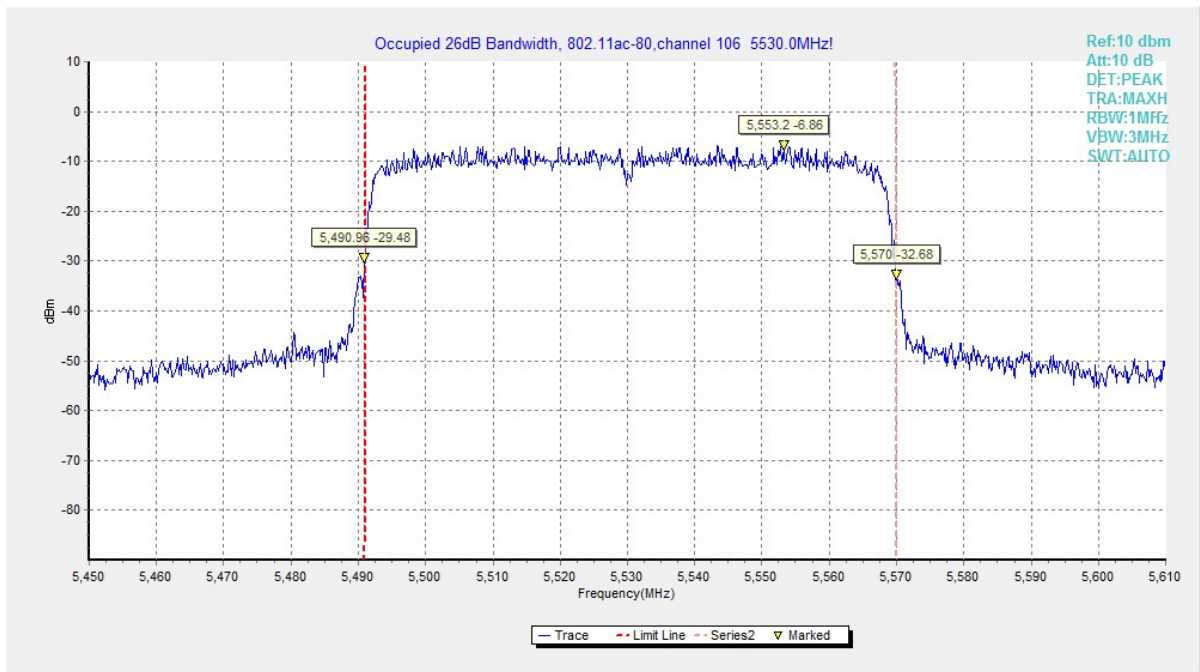
**Fig. 41 Occupied 26dB Bandwidth (802.11ac40, 5710MHz)**



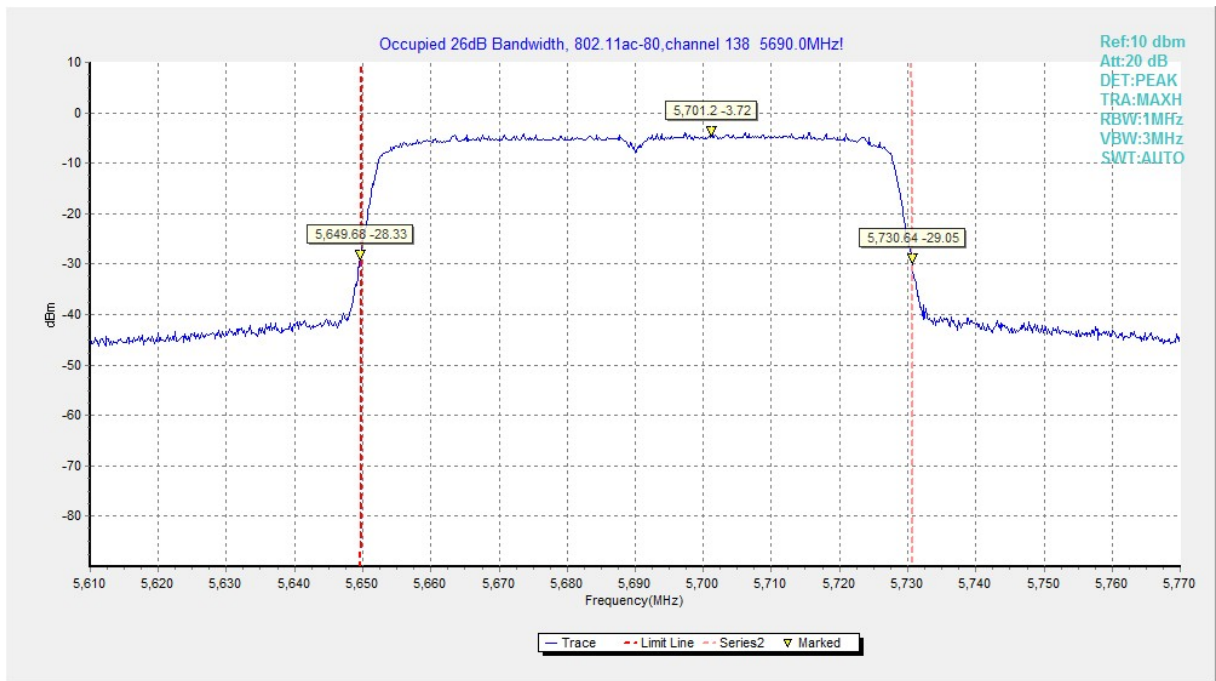
**Fig. 42 Occupied 26dB Bandwidth (802.11ac80, 5210MHz)**



**Fig. 43 Occupied 26dB Bandwidth (802.11ac80, 5290MHz)**



**Fig. 44 Occupied 26dB Bandwidth (802.11ac80, 5530MHz)**



**Fig. 45 Occupied 26dB Bandwidth (802.11ac80, 5690MHz)**



## A.5. Band Edges Compliance

### A5.1 Band Edges - Radiated

#### Measurement Limit:

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

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)).

#### Measurement Uncertainty:

Measurement Uncertainty	0.75dB
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#### Measurement Result:

Mode	Channel	Test Results	Conclusion
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802.11a	5180 MHz	Fig.46	P
	5320 MHz	Fig.47	P
	5500 MHz	Fig.48	P
	5700 MHz	Fig.49	P

802.11n HT20	5180 MHz	Fig.50	P
	5320 MHz	Fig.51	P
	5500 MHz	Fig.52	P
	5700 MHz	Fig.53	P

802.11ac HT20	5180 MHz	Fig.54	P
	5320 MHz	Fig.55	P
	5500 MHz	Fig.56	P
	5700 MHz	Fig.57	P

802.11n HT40	5190 MHz	Fig.58	P
	5310 MHz	Fig.59	P
	5510 MHz	Fig.60	P
	5670 MHz	Fig.61	P

802.11ac HT40	5190 MHz	Fig.62	P
	5310 MHz	Fig.63	P
	5510 MHz	Fig.64	P

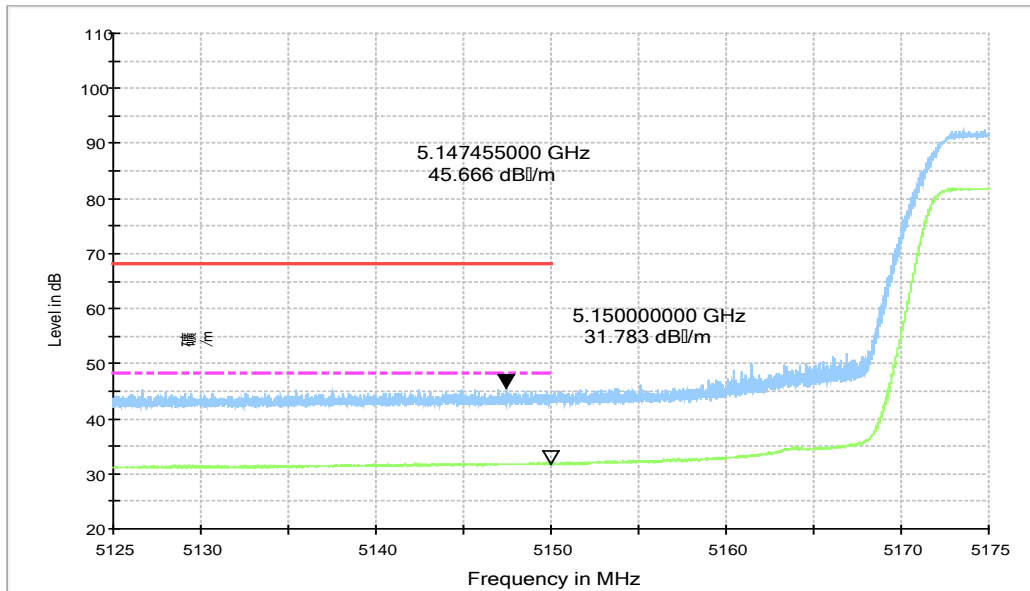


	5670 MHz	Fig.65	P
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802.11ac HT80	5210MHz	Fig.66	P
	5290MHz	Fig.67	P
	5530MHz	Fig.68	P
	5610MHz	Fig.69	P

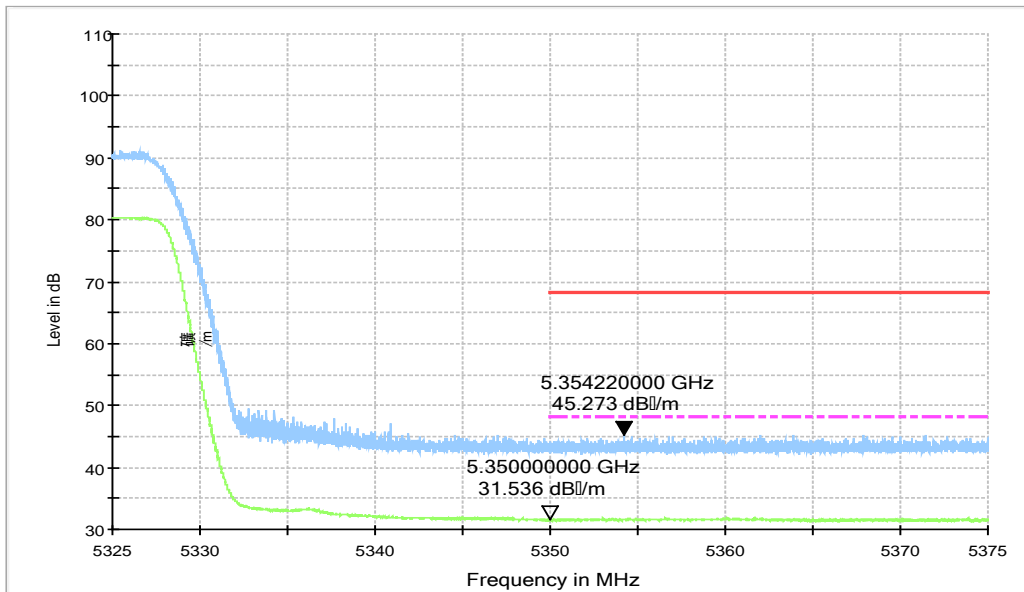
**Conclusion: PASS**  
**Test graphs as below:**

RE - Power-5.125GHz-5.175GHz



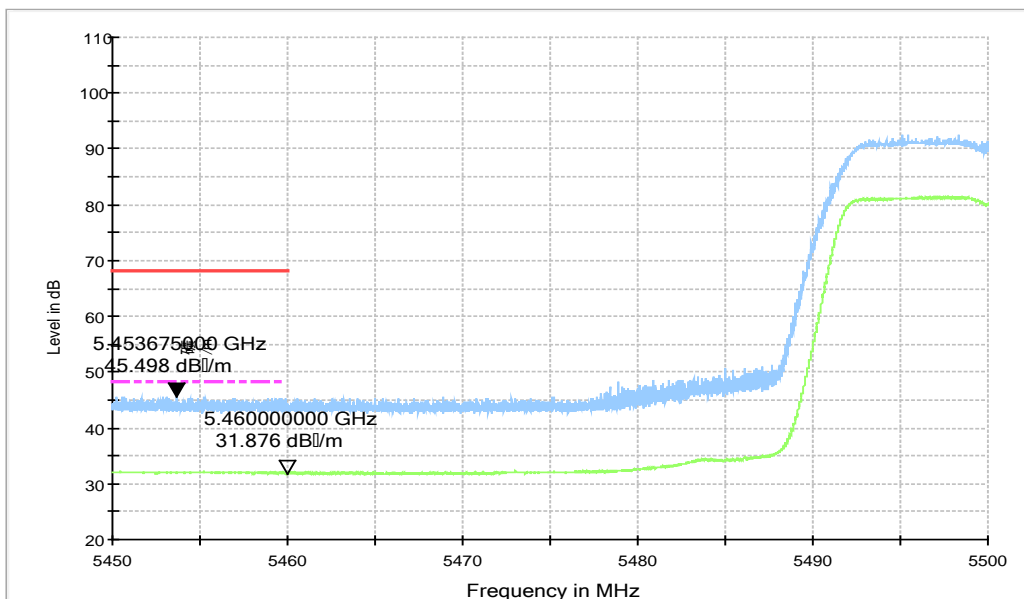
**Fig. 46 Band Edges (802.11a, 5180MHz)**

RE - Power-5.325GHz-5.375GHz



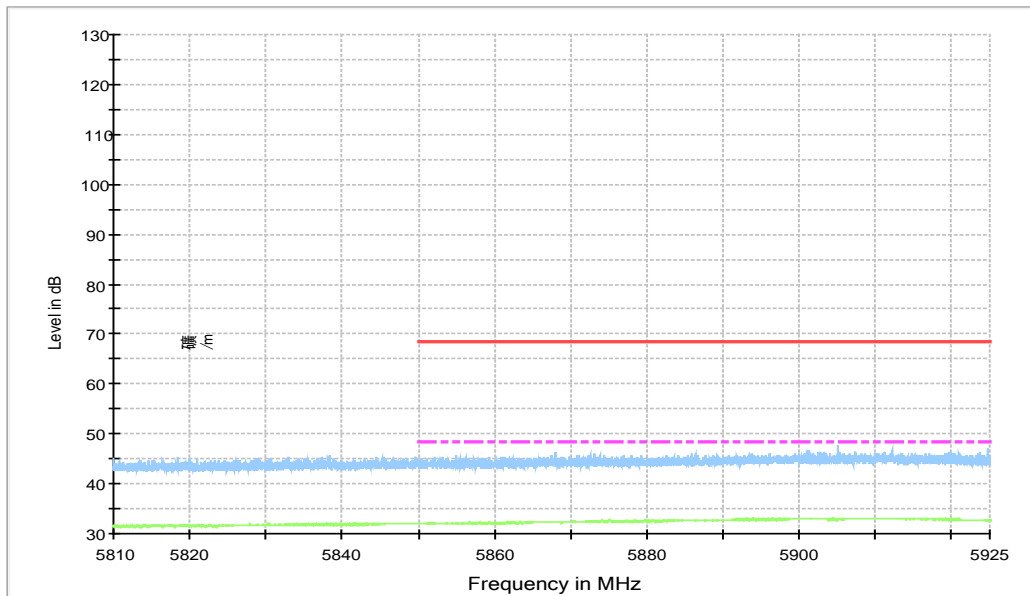
**Fig. 47 Band Edges (802.11a, 5320MHz)**

RE - Power-5.45GHz-5.50GHz



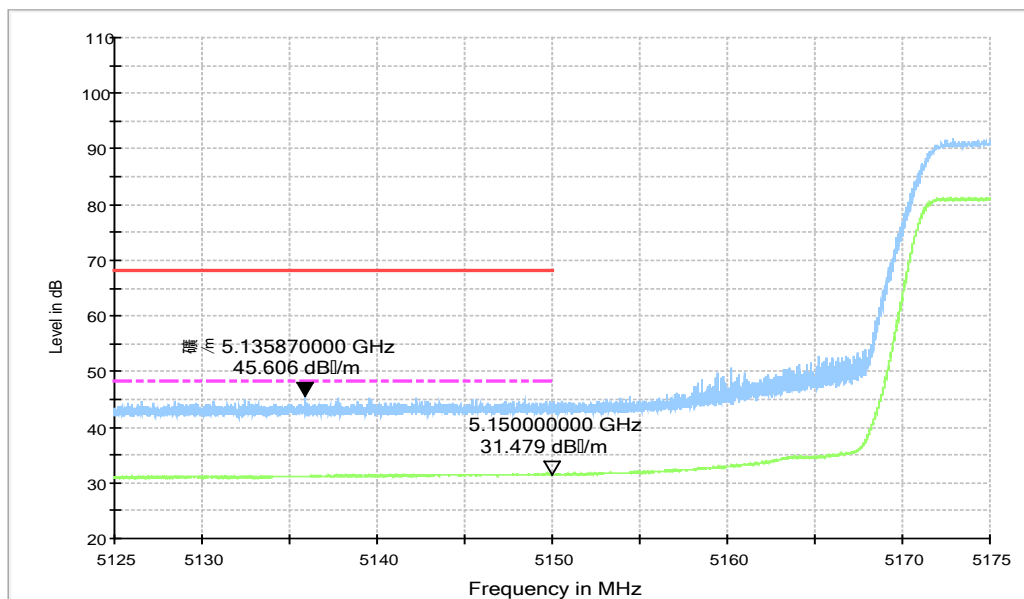
**Fig. 48 Band Edges (802.11a, 5500MHz)**

RE - Power-5.810GHz-5.925GHz



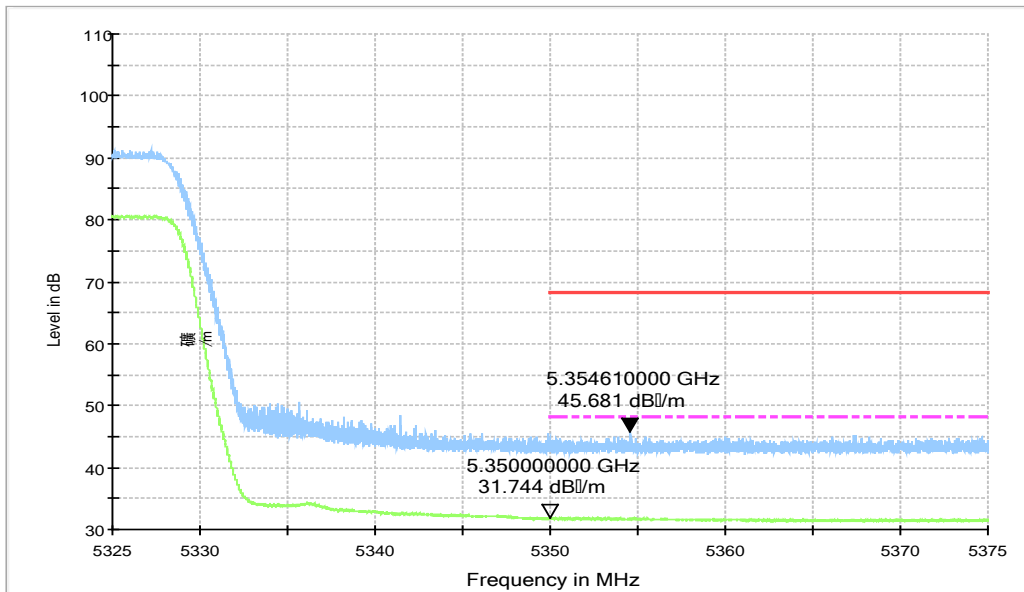
**Fig. 49 Band Edges (802.11a, 5720MHz)**

RE - Power-5.125GHz-5.175GHz



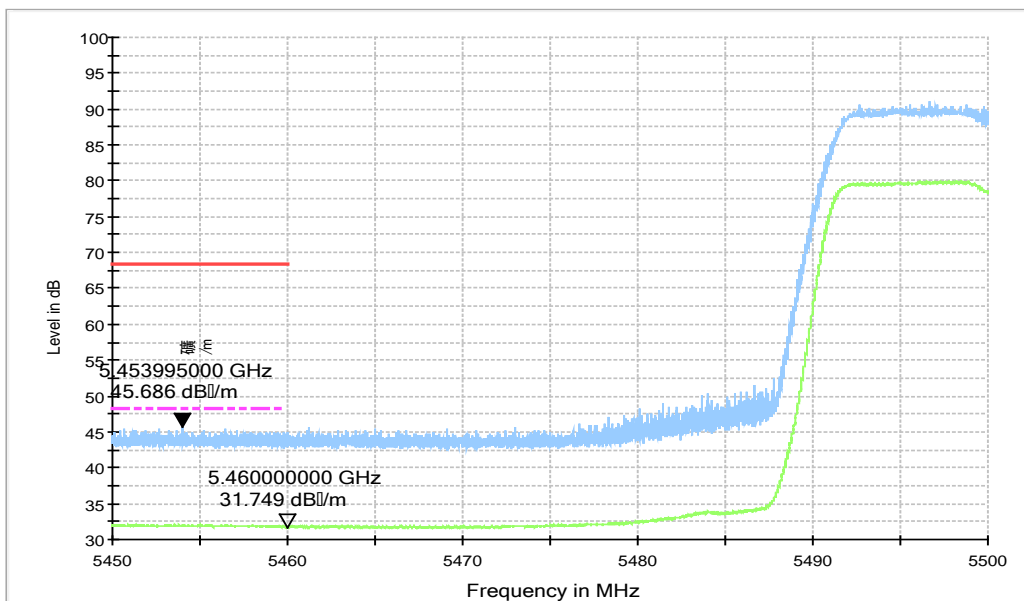
**Fig. 50 Band Edges (802.11n-HT20, 5180MHz)**

RE - Power-5.325GHz-5.375GHz



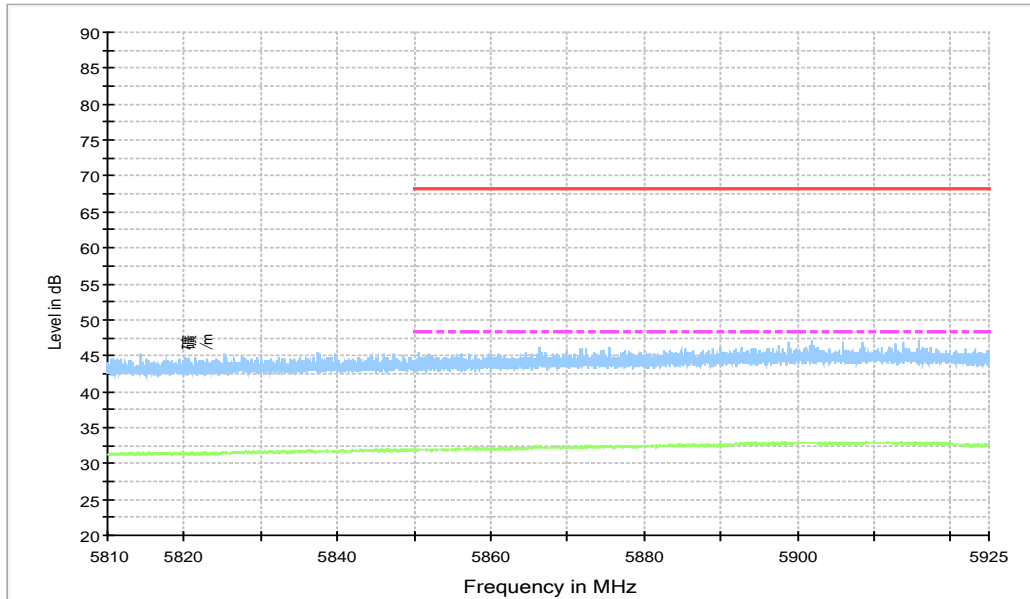
**Fig. 51 Band Edges (802.11n-HT20, 5320MHz)**

RE - Power-5.45GHz-5.50GHz



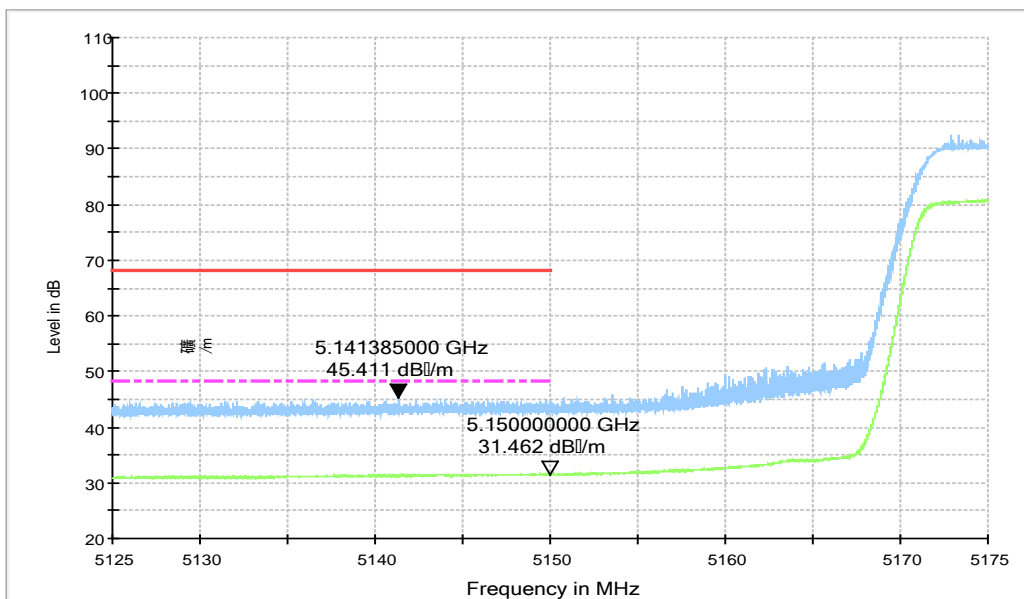
**Fig. 52 Band Edges (802.11n-HT20, 5500MHz)**

RE - Power-5.810GHz-5.925GHz



**Fig. 53 Band Edges (802.11n-HT20, 5720MHz)**

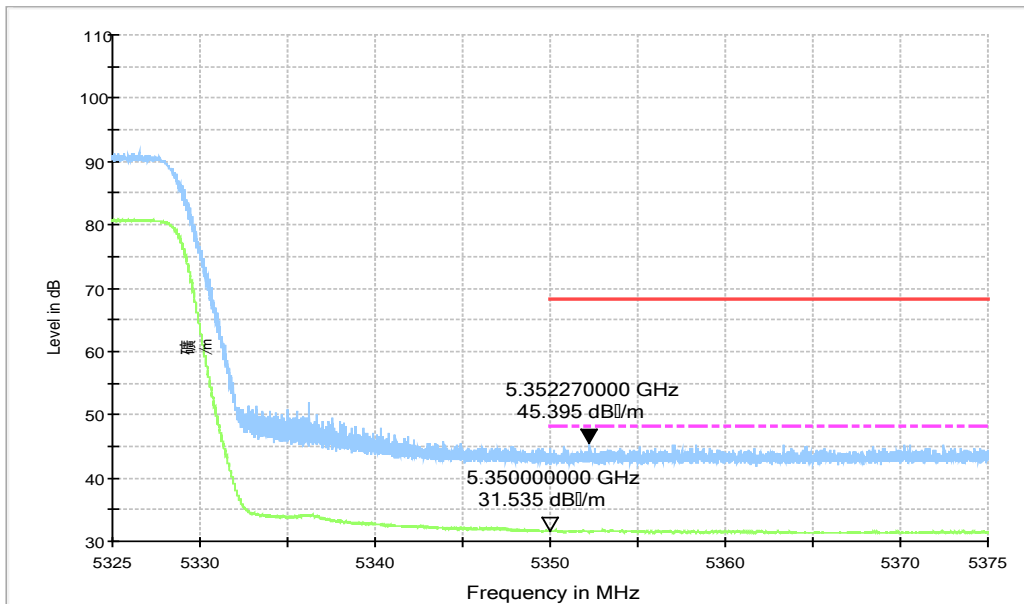
RE - Power-5.125GHz-5.175GHz



**Fig. 54 Band Edges (802.11ac-HT20, 5180MHz)**

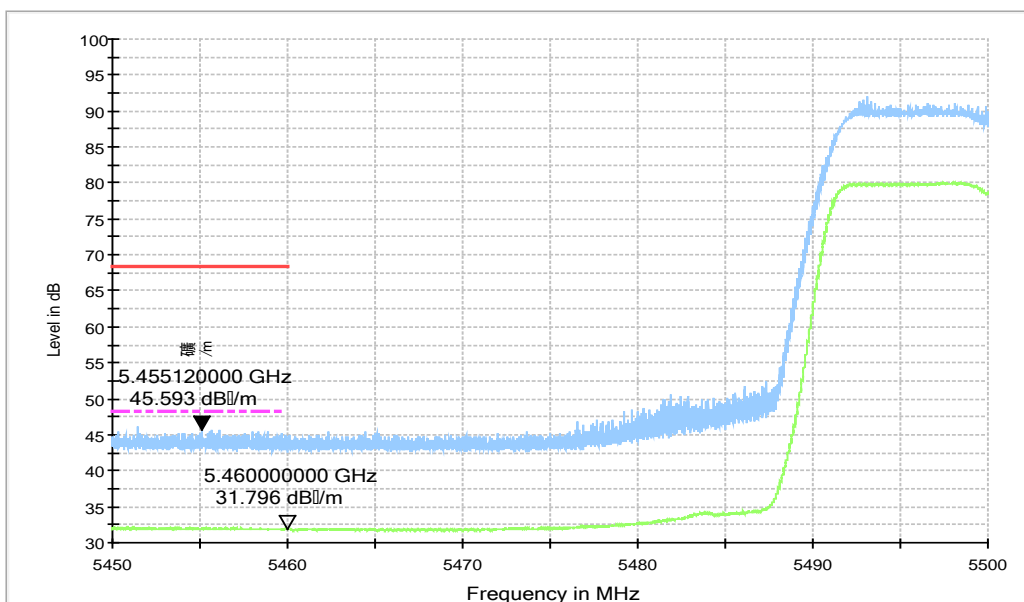


RE - Power-5.325GHz-5.375GHz



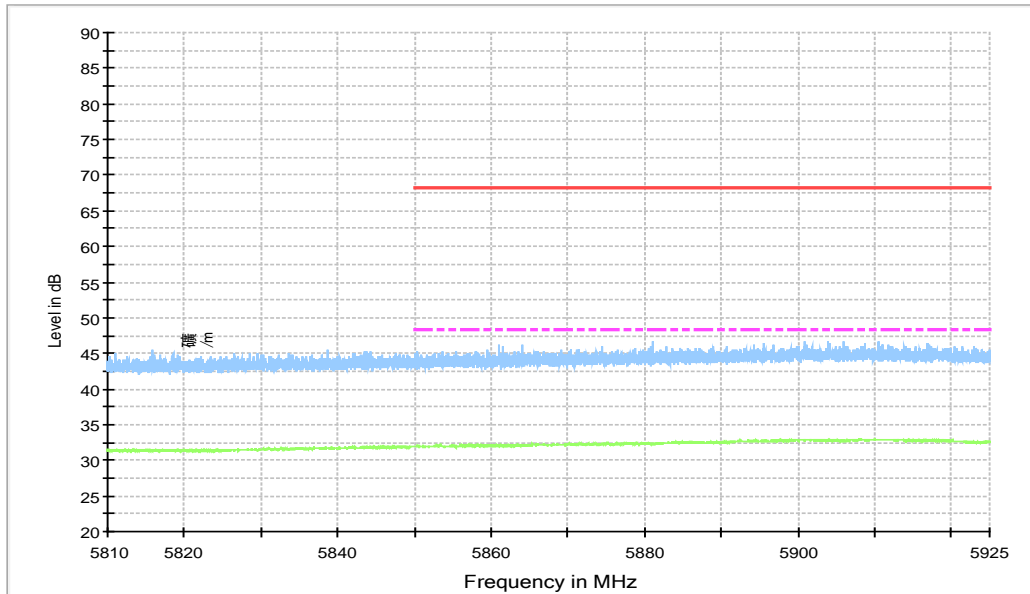
**Fig. 55 Band Edges (802.11ac-HT20, 5320MHz)**

RE - Power-5.45GHz-5.50GHz



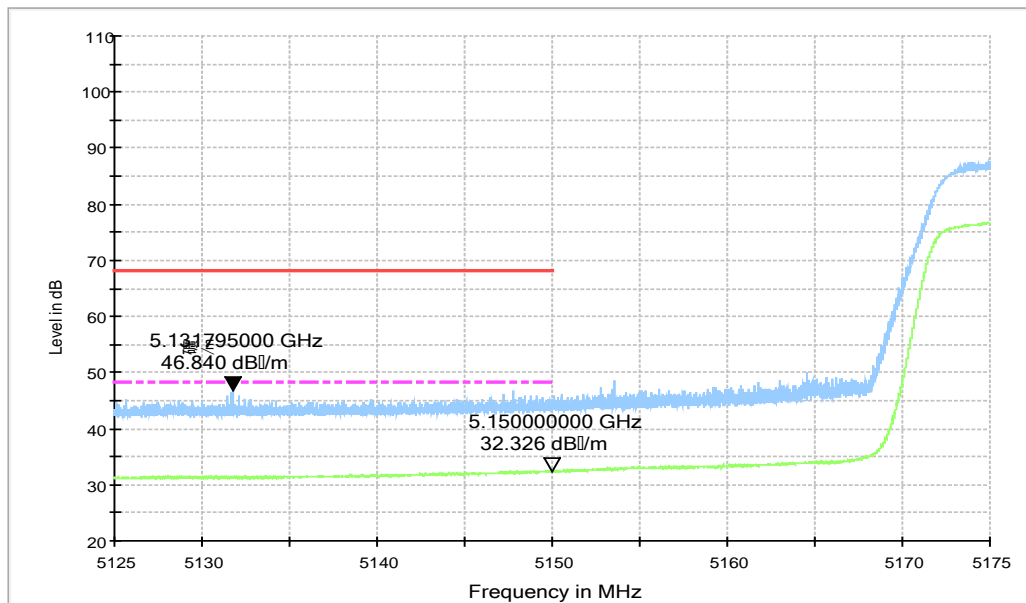
**Fig. 56 Band Edges (802.11ac-HT20, 5500MHz)**

RE - Power-5.810GHz-5.925GHz



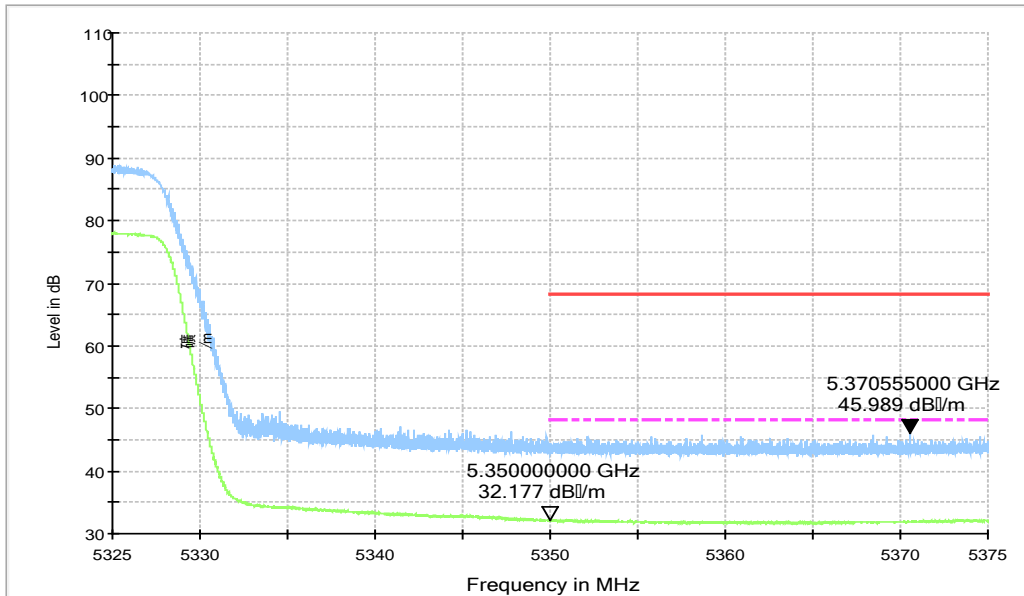
**Fig. 57 Band Edges (802.11ac-HT20, 5720MHz)**

RE - Power-5.125GHz-5.175GHz



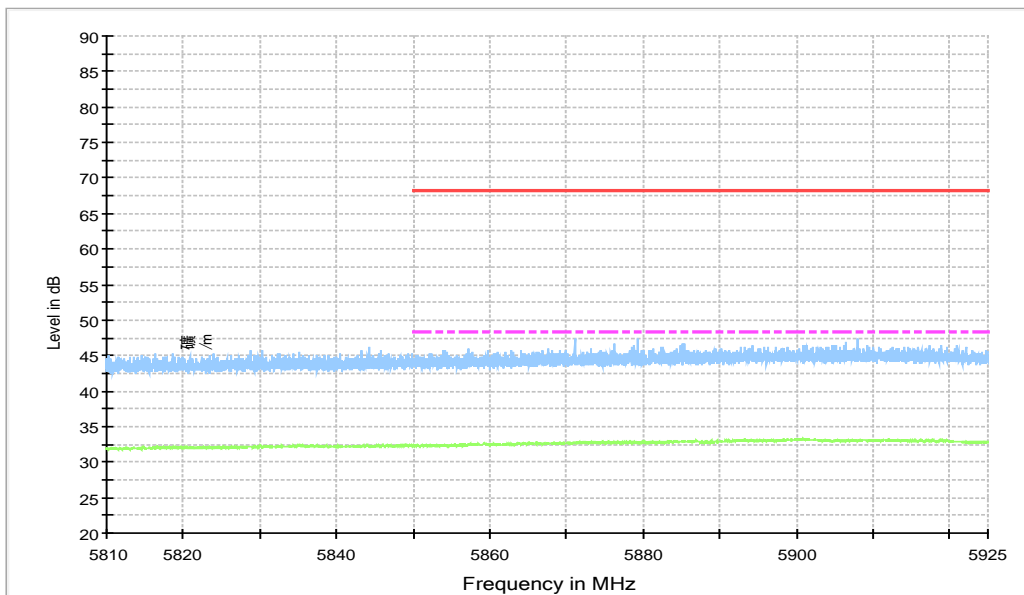
**Fig. 58 Band Edges (802.11n-HT40, 5190MHz)**

RE - Power-5.325GHz-5.375GHz



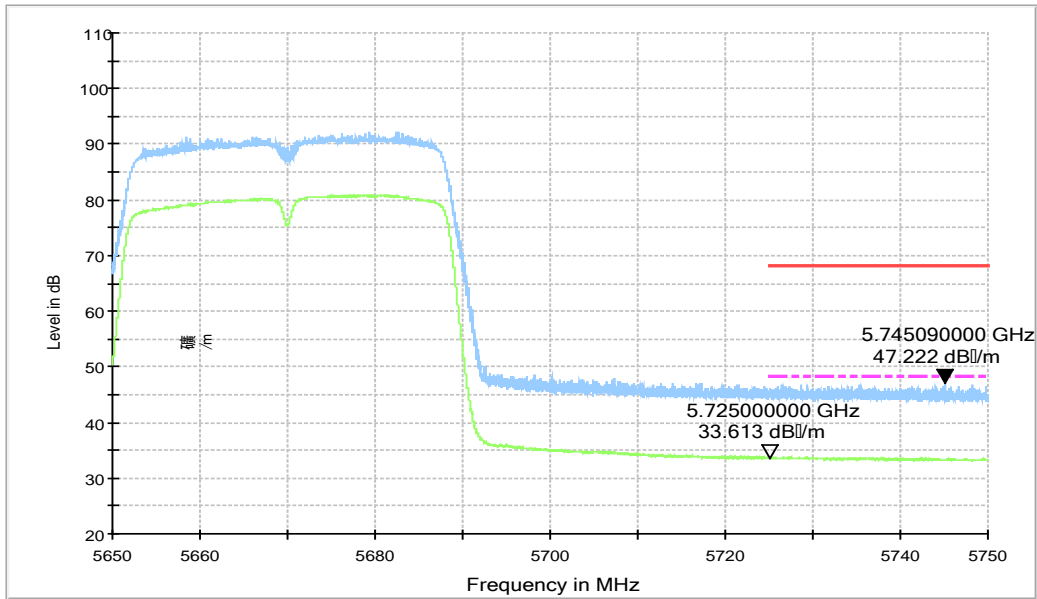
**Fig. 59 Band Edges (802.11n-HT40, 5310MHz)**

RE - Power-5.810GHz-5.925GHz



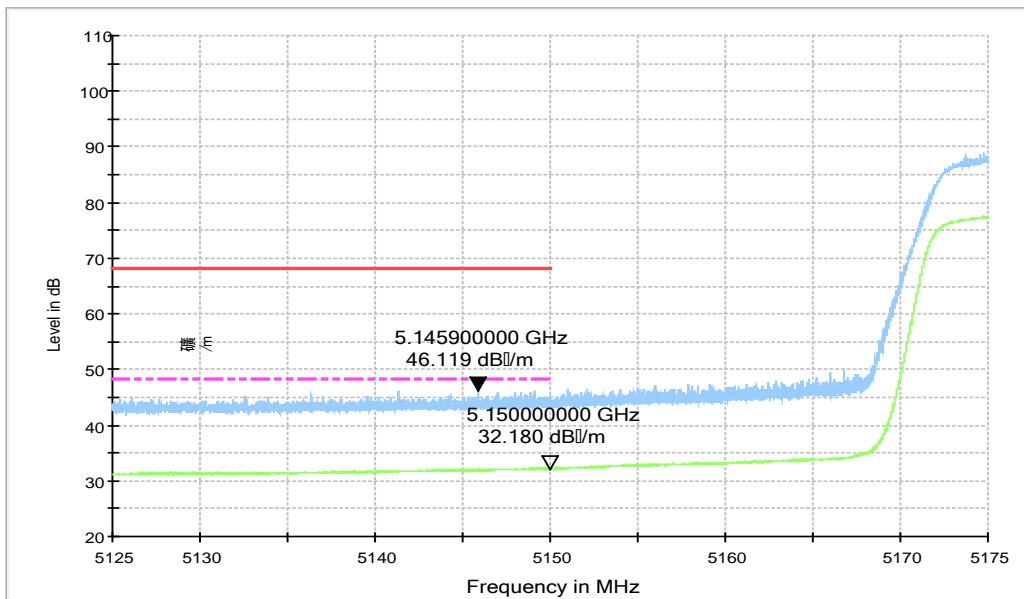
**Fig. 60 Band Edges (802.11n-HT40, 5510MHz)**

RE - Power-5.65GHz-5.75GHz



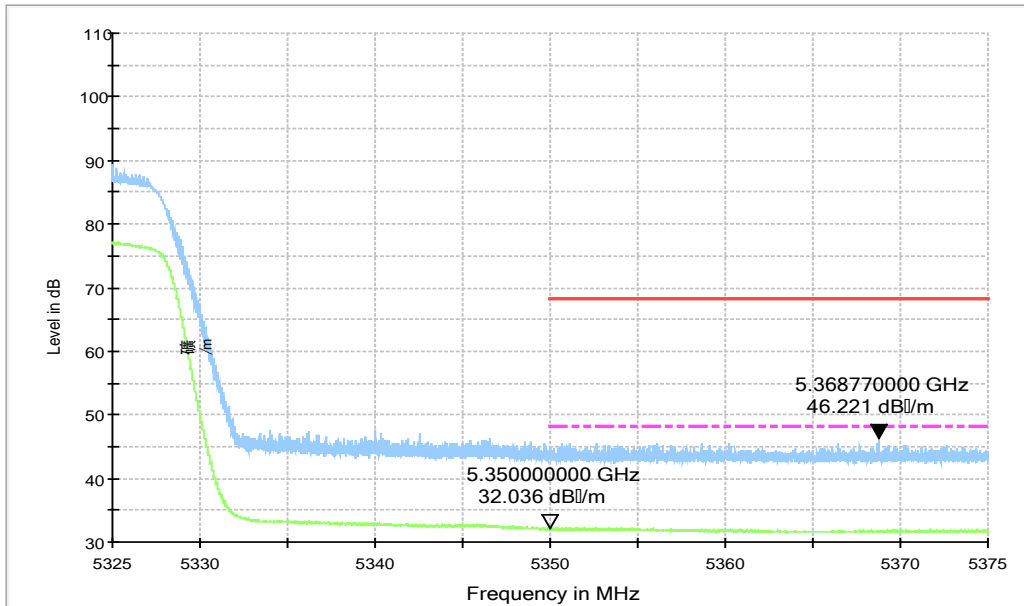
**Fig. 61 Band Edges (802.11n-HT40, 5710MHz)**

RE - Power-5.125GHz-5.175GHz



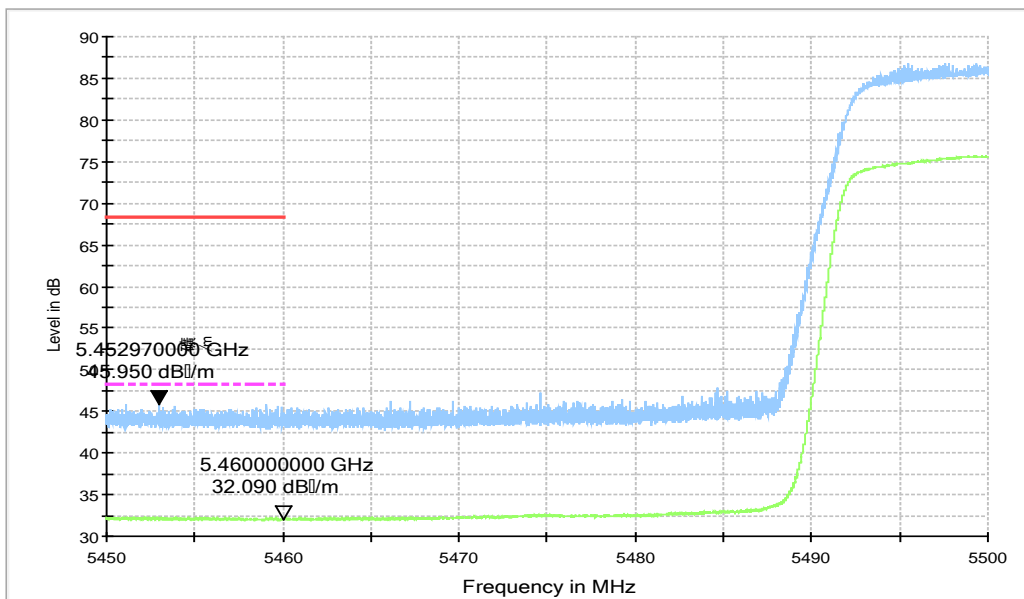
**Fig. 62 Band Edges (802.11ac-HT40, 5190MHz)**

RE - Power-5.325GHz-5.375GHz



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

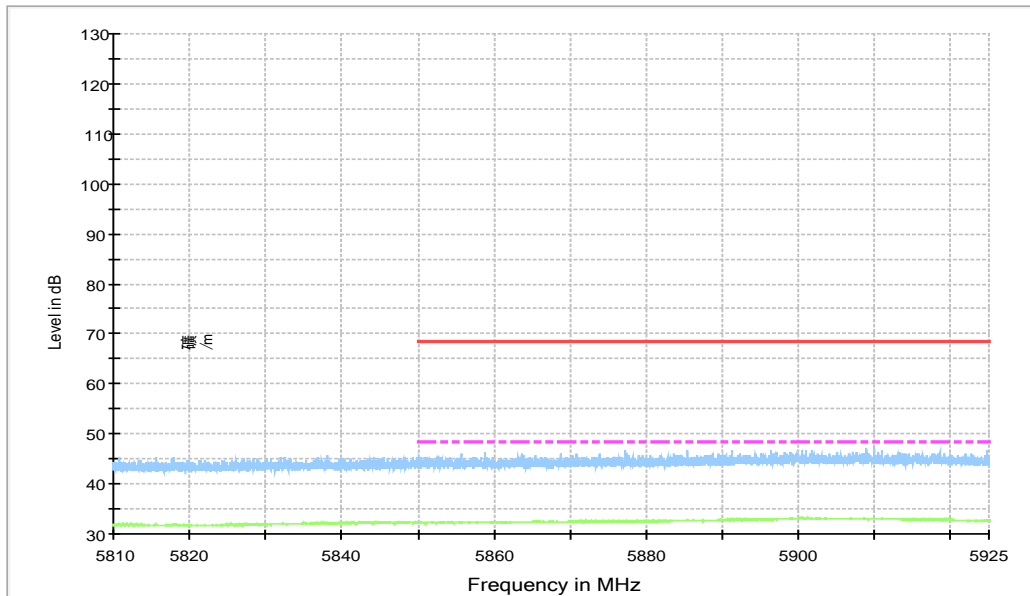
RE - Power-5.45GHz-5.50GHz



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

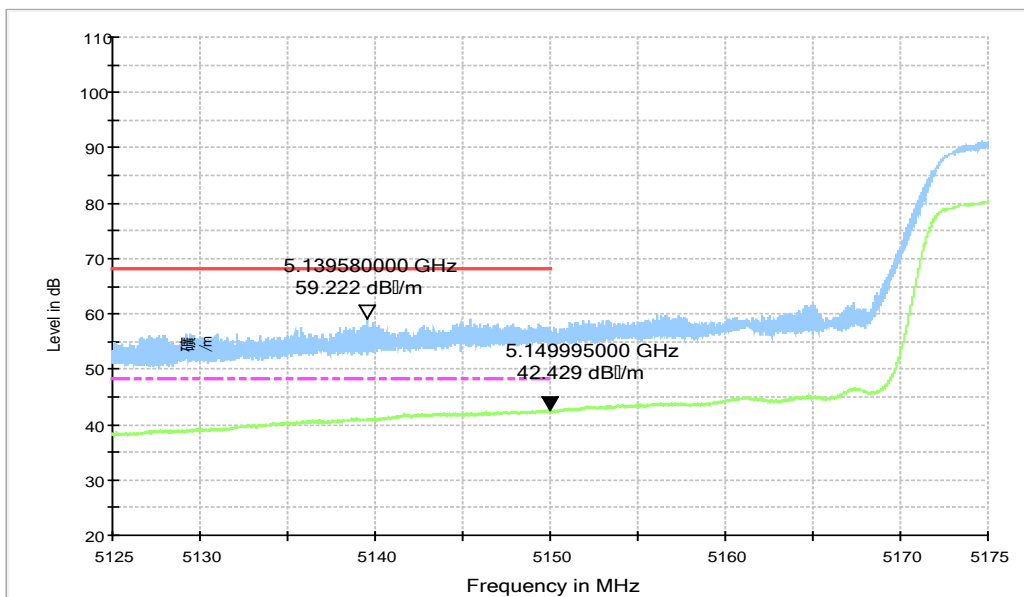


RE - Power-5.810GHz-5.925GHz



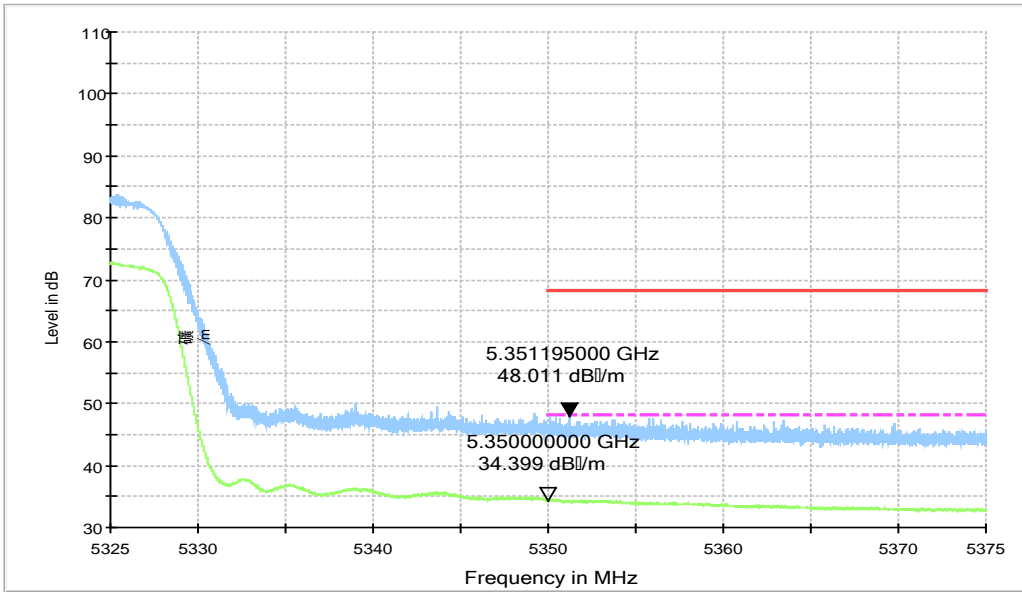
**Fig. 65 Band Edges (802.11ac-HT40, 5710MHz)**

RE - Power-5.125GHz-5.175GHz



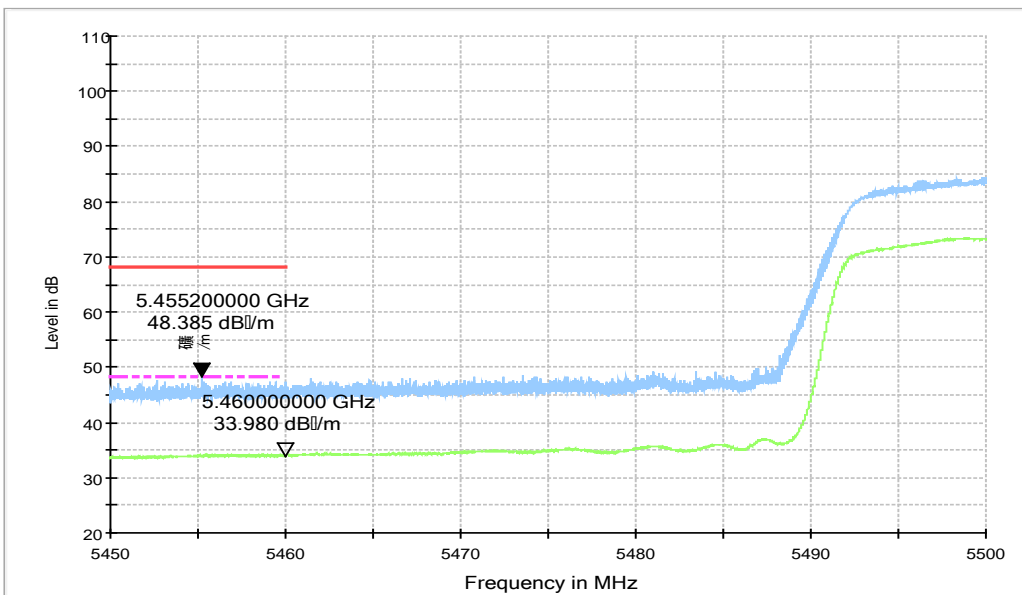
**Fig. 66 Band Edges (802.11ac-HT80, 5210MHz)**

RE - Power-5.325GHz-5.375GHz



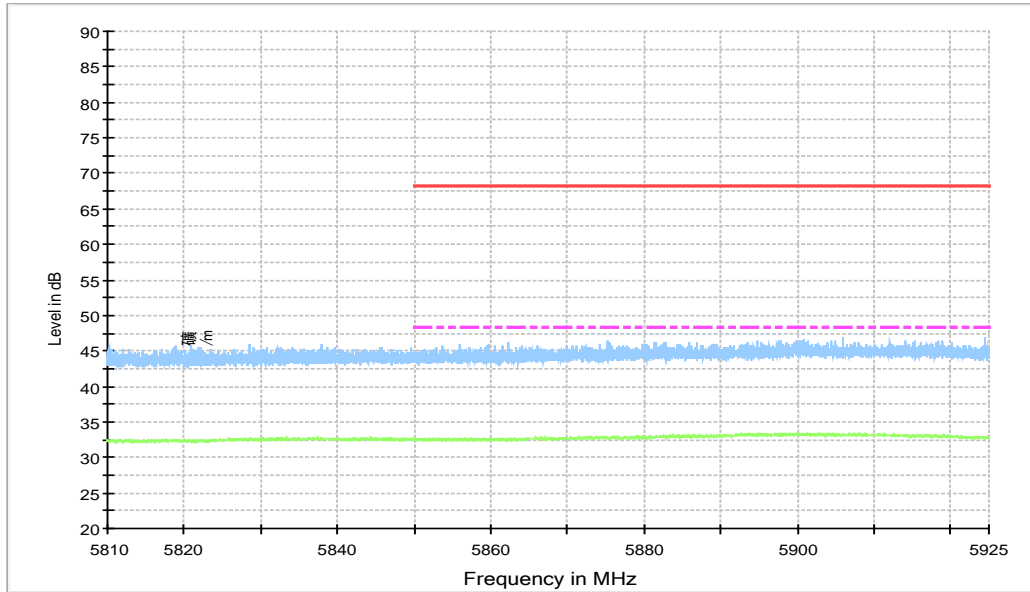
**Fig. 67 Band Edges (802.11ac-HT80, 5290MHz)**

RE - Power-5.45GHz-5.50GHz



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

RE - Power-5.810GHz-5.925GHz



**Fig. 69 Band Edges (802.11ac-HT80, 5690MHz)**

## 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:

#### Conclusion: PASS

#### Note:

A "reference path loss" is established and the  $A_{Rpl}$  is the attenuation of "reference path loss", and including the gain of receive antenna, the gain of the preamplifier, the cable loss.

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

The measurement results are obtained as described below:

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

#### Average

##### 82.11a

Channel 36

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	$P_{Mea}$ (dBuV/m)	Polarization
5146.400	34.3	-34.8	34.2	34.93	H
5150.000	34.4	-34.7	34.2	34.91	H
10360.000	34.3	-30.0	37.5	26.73	H
15540.000	37.0	-27.6	40.1	24.47	H
16953.600	39.1	-27.0	41.7	24.45	H
17120.800	38.6	-26.0	41.6	23.05	H



Channel 40

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
3545.200	33.6	-35.3	33.1	35.69	H
3758.800	36.9	-34.7	33.3	38.28	H
10400.000	34.3	-29.4	37.5	26.19	H
15600.000	37.2	-27.5	40.2	24.42	H
16954.400	39.0	-27.0	41.7	24.31	H
17057.600	38.9	-26.3	41.6	23.59	H

Channel 48

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
3615.600	40.6	-35.5	33.2	42.88	H
3666.800	35.4	-35.7	33.2	37.90	H
10480.000	33.7	-31.5	37.6	27.56	H
15720.000	37.1	-27.5	40.4	24.19	H
16942.400	39.0	-27.1	41.7	24.41	H
17025.600	39.1	-26.5	41.7	23.93	H

Channel 52

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
3752.000	35.5	-34.7	33.3	36.88	H
3789.200	35.0	-35.0	33.3	36.62	H
10520.000	33.6	-32.0	37.6	27.98	H
15780.000	36.5	-27.6	40.4	23.65	H
16954.400	39.0	-27.0	41.7	24.31	H
17008.000	39.0	-26.7	41.7	23.99	H





Channel 56

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
3557.600	37.5	-35.1	33.1	39.46	H
3758.000	38.2	-34.7	33.3	39.67	H
10560.000	33.5	-30.7	37.6	26.57	H
15840.000	36.7	-27.5	40.5	23.76	H
16948.000	39.0	-27.0	41.7	24.37	H
17008.800	39.0	-26.7	41.7	23.94	H

Channel 64

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5350.000	34.3	-34.6	34.4	34.48	H
5351.600	34.3	-34.5	34.4	34.41	H
10640.000	33.7	-29.0	37.7	24.99	H
15960.000	36.6	-27.1	40.7	23.00	H
16952.000	39.0	-27.0	41.7	24.33	H
17049.600	38.9	-26.4	41.6	23.59	H

Channel 100

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5451.000	35.6	-33.1	34.5	34.19	H
5455.500	35.5	-33.2	34.5	34.21	H
11000.000	34.3	-30.1	37.8	26.61	H
16500.000	38.0	-27.0	41.3	23.68	H
16951.200	39.0	-27.0	41.7	24.34	H
17008.000	39.0	-26.7	41.7	23.96	H

Channel 120

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
3533.200	40.5	-35.5	33.1	42.88	H
3541.600	41.7	-35.3	33.1	43.91	H
11200.000	34.2	-30.3	38.0	26.49	H
16800.000	37.9	-26.8	41.5	23.15	H
16971.200	39.0	-26.9	41.7	24.19	H
17037.600	38.9	-26.5	41.7	23.68	H



Channel 144

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5725.520	36.4	-33.6	34.8	35.16	H
5730.000	36.1	-33.7	34.8	35.00	H
11400.000	36.6	-30.4	38.1	28.81	H
17100.000	38.6	-26.1	41.6	23.08	H
17623.200	38.5	-26.5	41.2	23.76	H
17898.400	38.8	-26.2	41.3	23.75	H

802.11n-HT20

Channel 36

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5148.400	34.3	-34.8	34.2	34.84	H
5150.000	34.3	-34.7	34.2	34.85	H
10360.000	34.0	-30.0	37.5	26.46	H
15540.000	37.0	-27.6	40.1	24.47	H
16925.600	38.8	-27.0	41.6	24.17	H
17028.000	38.9	-26.5	41.7	23.74	H

Channel 40

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
3540.400	36.8	-35.4	33.1	39.00	H
3612.800	37.8	-35.5	33.2	40.06	H
10400.000	34.1	-29.4	37.5	26.03	H
15600.000	37.1	-27.5	40.2	24.40	H
16973.600	39.0	-26.9	41.7	24.21	H
17051.200	38.9	-26.4	41.6	23.67	H

Channel 48

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
3742.000	36.2	-34.7	33.3	37.68	H
3803.200	35.1	-35.2	33.3	36.99	H
10480.000	33.6	-31.5	37.6	27.51	H
15720.000	37.1	-27.5	40.4	24.22	H
16952.800	39.0	-27.0	41.7	24.38	H
17026.400	38.9	-26.5	41.7	23.77	H



Channel 52

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
3528.800	36.0	-35.6	33.1	38.45	H
3759.200	38.1	-34.7	33.3	39.48	H
10520.000	33.8	-32.0	37.6	28.15	H
15780.000	36.9	-27.6	40.4	24.02	H
16989.180	39.0	-26.8	41.7	24.07	H
17055.400	38.9	-26.4	41.6	23.57	H

Channel 56

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
3638.000	35.2	-35.7	33.2	37.67	H
3764.800	35.3	-34.7	33.3	36.72	H
10560.000	33.8	-30.7	37.6	26.85	H
15840.000	36.9	-27.5	40.5	23.96	H
16973.350	38.9	-26.9	41.7	24.11	H
17044.240	38.9	-26.4	41.7	23.70	H

Channel 64

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5350.000	34.2	-34.6	34.4	34.43	H
5374.000	34.6	-34.1	34.4	34.30	H
10640.000	33.8	-29.0	37.7	25.16	H
15960.000	37.0	-27.1	40.7	23.40	H
16972.530	38.9	-26.9	41.7	24.15	H
17042.560	38.9	-26.4	41.7	23.64	H

Channel 100

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5451.000	35.6	-33.1	34.5	34.19	H
5455.500	35.5	-33.2	34.5	34.21	H
11000.000	34.3	-30.1	37.8	26.61	H
16500.000	38.0	-27.0	41.3	23.68	H
16951.200	39.0	-27.0	41.7	24.34	H
17008.000	39.0	-26.7	41.7	23.96	H

Channel 120

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
3533.200	40.5	-35.5	33.1	42.88	H
3541.600	41.7	-35.3	33.1	43.91	H
11200.000	34.2	-30.3	38.0	26.49	H
16800.000	37.9	-26.8	41.5	23.15	H
16971.200	39.0	-26.9	41.7	24.19	H
17037.600	38.9	-26.5	41.7	23.68	H

Channel 144

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5725.520	36.4	-33.6	34.8	35.16	H
5730.000	36.1	-33.7	34.8	35.00	H
11400.000	36.6	-30.4	38.1	28.81	H
17100.000	38.6	-26.1	41.6	23.08	H
17623.200	38.5	-26.5	41.2	23.76	H
17898.400	38.8	-26.2	41.3	23.75	H

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Channel 38

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5147.200	34.5	-34.8	34.2	35.05	H
5150.000	34.5	-34.7	34.2	35.02	H
10380.000	34.0	-29.7	37.5	26.17	H
15570.400	37.0	-27.6	40.2	24.41	H
16948.000	39.0	-27.0	41.7	24.37	H
17027.200	38.9	-26.5	41.7	23.72	H

Channel 46

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
3734.800	36.5	-34.7	33.3	37.93	H
5667.600	36.5	-32.7	34.7	34.41	H
10460.000	33.8	-30.9	37.6	27.13	H
15690.400	37.1	-27.4	40.3	24.26	H
16947.200	39.0	-27.1	41.7	24.37	H
17021.600	39.0	-26.6	41.7	23.87	H



Channel 54

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
3699.200	34.3	-35.6	33.3	36.71	H
5899.200	37.0	-32.4	35.1	34.28	H
10540.000	33.7	-31.3	37.6	27.44	H
15810.000	36.9	-27.6	40.5	24.08	H
16955.230	39.0	-27.0	41.7	24.31	H
17916.820	38.8	-26.1	41.3	23.67	H

Channel 62

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5350.000	34.5	-34.6	34.4	34.64	H
5372.400	34.7	-34.1	34.4	34.40	H
10620.000	33.8	-28.8	37.6	25.02	H
15930.000	36.9	-27.2	40.6	23.52	H
16858.380	39.0	-26.9	41.6	24.30	H
17024.690	39.0	-26.6	41.7	23.84	H

Channel 102

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5455.520	35.6	-33.2	34.5	34.30	H
5458.530	35.5	-33.2	34.5	34.29	H
11020.000	34.4	-30.7	37.8	27.28	H
16530.000	38.0	-26.9	41.3	23.51	H
17012.560	39.0	-26.6	41.7	23.94	H
17898.630	38.9	-26.2	41.3	23.77	H

Channel 118

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
3548.000	36.4	-35.2	33.1	38.51	H
3758.800	38.4	-34.7	33.3	39.81	H
11180.000	34.5	-30.1	37.9	26.70	H
16770.000	37.9	-26.7	41.5	23.09	H
17015.860	39.0	-26.6	41.7	23.90	H
17895.470	38.8	-26.2	41.3	23.76	H





Channel 142

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5728.560	36.2	-33.7	34.8	35.01	H
5731.520	36.1	-33.7	34.8	34.99	H
11340.000	35.4	-30.5	38.1	27.76	H
17010.000	38.9	-26.6	41.7	23.89	H
17045.650	38.9	-26.4	41.7	23.68	H
17893.860	38.9	-26.2	41.3	23.84	H

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Channel 36

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5148.800	34.4	-34.8	34.2	34.93	H
5150.000	34.3	-34.7	34.2	34.84	H
10360.000	34.1	-30.0	37.5	26.54	H
15540.000	36.9	-27.6	40.1	24.41	H
16973.000	39.0	-26.9	41.7	24.18	H
17088.800	38.8	-26.1	41.6	23.28	H

Channel 40

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
3549.600	41.6	-35.2	33.1	45.60	H
3758.400	39.1	-34.7	33.3	40.48	H
10400.000	34.1	-29.4	37.5	25.99	H
15600.000	37.2	-27.5	40.2	24.45	H
16971.200	39.0	-26.9	41.7	24.19	H
17026.400	38.8	-26.5	41.7	23.71	H

Channel 48

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
3520.800	34.7	-35.7	33.1	37.29	H
3815.600	35.3	-35.4	33.4	37.33	H
10480.000	33.6	-31.5	37.6	27.51	H
15720.000	37.0	-27.5	40.4	24.12	H
16947.200	39.0	-27.1	41.7	24.39	H
17008.800	39.0	-26.7	41.7	23.93	H



Channel 52

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
3528.400	40.9	-35.6	33.1	43.32	H
5903.200	37.0	-32.3	35.1	34.28	H
10520.000	34.1	-32.0	37.6	28.49	H
15780.000	37.0	-27.6	40.4	24.19	H
16992.180	38.9	-26.8	41.7	23.99	H
17057.400	38.9	-26.3	41.6	23.59	H

Channel 56

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5670.800	36.8	-32.6	34.7	34.61	H
5897.600	37.0	-32.4	35.1	34.33	H
10560.000	34.0	-30.7	37.6	27.05	H
15840.000	36.9	-27.5	40.5	23.93	H
16973.450	38.9	-26.9	41.7	24.10	H
17044.800	39.0	-26.4	41.7	23.78	H

Channel 64

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5350.000	34.3	-34.6	34.4	34.49	H
5352.800	34.4	-34.5	34.4	34.51	H
10640.000	33.8	-29.0	37.7	25.15	H
15960.000	36.9	-27.1	40.7	23.36	H
16973.330	38.9	-26.9	41.7	24.13	H
17046.120	38.9	-26.4	41.7	23.62	H

Channel 100

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5451.000	35.6	-33.1	34.5	34.18	H
5454.000	35.5	-33.1	34.5	34.19	H
11000.000	34.3	-30.1	37.8	26.65	H
16500.000	38.1	-27.0	41.3	23.82	H
16950.890	39.0	-27.0	41.7	24.34	H
17018.000	39.0	-26.6	41.7	23.90	H



Channel 120

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
3758.400	39.1	-34.7	33.3	40.54	H
3815.200	38.1	-35.4	33.4	40.09	H
11200.000	34.4	-30.3	38.0	26.68	H
16800.000	38.0	-26.8	41.5	23.26	H
16968.400	39.0	-26.9	41.7	24.21	H
17035.400	38.9	-26.5	41.7	23.74	H

Channel 144

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5725.530	36.2	-33.6	34.8	34.96	H
5727.200	36.2	-33.6	34.8	35.01	H
11400.000	36.2	-30.4	38.1	28.46	H
17100.000	38.9	-26.1	41.6	23.38	H
17628.200	38.6	-26.5	41.2	23.90	H
17900.850	38.9	-26.2	41.3	23.76	H

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Channel 38

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5146.400	34.5	-34.8	34.2	35.04	H
5150.000	34.6	-34.7	34.2	35.08	H
10380.000	34.0	-29.7	37.5	26.16	H
15570.400	37.1	-27.6	40.2	24.49	H
16974.400	39.0	-26.9	41.7	24.19	H
17035.200	38.9	-26.5	41.7	23.68	H

Channel 46

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
3488.800	34.2	-35.8	33.1	36.88	H
3567.200	37.4	-35.2	33.2	39.40	H
10460.000	33.7	-30.9	37.6	26.99	H
15490.400	37.1	-27.8	40.1	24.78	H
16952.000	39.0	-27.0	41.7	24.36	H
17038.400	38.9	-26.5	41.7	23.65	H



Channel 54

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
3494.800	34.5	-35.8	33.1	37.24	H
3633.600	37.0	-35.6	33.2	39.44	H
10540.000	33.7	-31.3	37.6	27.39	H
15810.000	36.9	-27.6	40.5	24.07	H
17914.860	38.9	-26.1	41.3	23.78	H
17028.660	39.0	-26.5	41.7	23.81	H

Channel 62

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5350.000	34.4	-34.6	34.4	34.57	H
5371.600	34.6	-34.1	34.4	34.35	H
10620.000	34.0	-28.8	37.6	25.21	H
15930.000	37.0	-27.2	40.6	23.54	H
16955.760	39.0	-27.0	41.7	24.30	H
17912.590	38.9	-26.1	41.3	23.71	H

Channel 102

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5451.020	35.6	-33.1	34.5	34.23	H
5454.350	35.5	-33.1	34.5	34.16	H
11020.000	34.4	-30.7	37.8	27.29	H
16530.000	37.9	-26.9	41.3	23.51	H
17012.560	39.0	-26.6	41.7	23.93	H
17898.630	38.9	-26.2	41.3	23.81	H

Channel 118

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
3548.000	41.9	-35.2	33.1	43.98	H
3758.400	39.4	-34.7	33.3	40.84	H
11180.000	34.5	-30.1	37.9	26.70	H
16770.000	37.9	-26.7	41.5	23.12	H
17015.860	39.0	-26.6	41.7	23.90	H
17895.470	38.9	-26.2	41.3	23.77	H



Channel 142

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5725.520	36.3	-33.6	34.8	35.05	H
5736.450	36.0	-33.8	34.8	34.97	H
11340.000	35.4	-30.5	38.1	27.83	H
17010.000	38.9	-26.6	41.7	23.90	H
17045.650	38.9	-26.4	41.7	23.65	H
17893.860	38.9	-26.2	41.3	23.81	H

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Channel 42

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5149.860	34.8	-34.8	34.2	42.88	H
5145.628	34.4	-34.8	34.2	43.91	H
10420.000	33.7	-29.8	37.5	26.49	H
15630.000	36.9	-27.4	40.3	23.15	H
16959.328	38.9	-27.0	41.7	24.19	H
17064.476	39.0	-26.3	41.6	23.68	H

Channel 58

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5367.240	34.6	-34.2	34.4	34.37	H
5372.830	34.6	-34.1	34.4	34.30	H
10580.000	33.8	-30.0	37.6	26.17	H
15870.000	36.8	-27.4	40.5	23.66	H
16858.380	39.0	-26.9	41.6	24.30	H
17024.690	39.0	-26.6	41.7	23.84	H

Channel 106

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5450.860	35.7	-33.1	34.5	34.32	H
5452.460	35.7	-33.1	34.5	34.35	H
11060.000	33.7	-31.3	37.8	27.10	H
16590.000	37.3	-26.6	41.4	22.52	H
16972.860	38.9	-26.9	41.7	24.14	H
17046.760	38.9	-26.4	41.7	23.62	H



**Peak**

**802.11a**

Channel 36

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5145.685	45.3	-34.8	34.2	45.94	H
5147.455	45.7	-34.8	34.2	46.23	H
10359.950	48.4	-30.0	37.5	40.84	H
15539.850	52.4	-27.6	40.1	39.92	V
16932.450	56.3	-27.0	41.6	41.67	H
17042.450	56.5	-26.4	41.7	41.24	H

Channel 40

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5687.400	46.6	-32.9	34.8	44.72	H
6398.600	47.2	-32.7	35.5	44.39	H
10400.100	48.2	-29.4	37.5	40.11	H
15599.800	52.3	-27.5	40.2	39.53	H
16871.950	56.1	-26.9	41.6	41.39	H
17011.650	56.2	-26.6	41.7	41.18	V

Channel 48

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
3515.800	47.1	-35.8	33.1	49.77	H
4405.600	49.2	-34.5	33.9	49.78	H
10479.850	48.2	-31.5	37.6	42.02	V
15720.250	53.0	-27.5	40.4	40.17	V
16925.850	56.3	-27.0	41.6	41.69	H
17038.600	56.7	-26.5	41.7	41.52	H

Channel 52

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5687.800	46.3	-32.9	34.8	44.47	H
5912.000	46.3	-32.4	35.1	43.65	H
10520.000	48.1	-32.0	37.6	42.48	V
15780.200	51.6	-27.6	40.4	38.81	H
16984.700	56.1	-26.8	41.7	41.18	V
17066.100	56.6	-26.3	41.6	41.29	V



Channel 56

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5677.800	46.6	-32.7	34.8	44.53	H
5915.400	46.3	-32.4	35.1	43.66	H
10560.150	47.2	-30.6	37.6	40.18	V
15840.150	51.7	-27.5	40.5	38.74	H
16972.600	56.6	-26.9	41.7	41.85	V
17047.950	56.0	-26.4	41.7	40.79	V

Channel 64

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5354.220	45.3	-34.5	34.4	45.37	H
5361.990	45.2	-34.3	34.4	45.16	H
10639.900	47.0	-29.0	37.7	38.28	H
15960.050	54.0	-27.1	40.7	40.48	H
16969.300	56.2	-26.9	41.7	41.42	H
17060.050	55.5	-26.3	41.6	40.15	H

Channel 100

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5453.675	45.5	-33.1	34.5	44.17	H
5459.125	45.4	-33.2	34.5	44.13	H
11000.150	48.3	-30.1	37.8	40.59	V
16500.150	53.3	-27.0	41.3	38.96	H
17263.000	56.1	-26.7	41.4	41.44	H
17092.000	56.5	-26.1	41.6	40.99	H

Channel 120

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
3616.600	46.4	-35.5	33.2	48.74	H
4357.200	47.0	-34.1	33.9	47.27	H
11199.800	48.0	-30.3	38.0	40.33	V
16799.900	54.3	-26.8	41.5	39.58	H
17398.850	56.8	-26.5	41.3	41.97	V
17618.300	56.1	-26.5	41.2	41.33	V



Channel 144

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5728.525	48.1	-33.7	34.8	46.93	H
5731.080	48.0	-33.7	34.8	46.90	H
11400.000	49.3	-30.4	38.1	41.54	H
17100.200	53.7	-26.1	41.6	38.20	V
17309.200	56.1	-26.8	41.4	41.45	V
17624.900	55.9	-26.5	41.2	41.16	H

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Channel 36

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5135.870	45.6	-35.0	34.2	46.37	H
5139.585	45.2	-34.9	34.2	45.91	H
10359.950	47.6	-30.0	37.5	40.03	V
15539.850	52.1	-27.6	40.1	39.56	H
17013.300	56.4	-26.6	41.7	41.32	V
17565.500	57.0	-26.4	41.2	42.20	H

Channel 40

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
3759.400	45.2	-34.7	33.3	46.61	H
4345.600	47.9	-34.3	33.9	48.30	H
10400.100	47.7	-29.4	37.5	39.64	V
15599.800	52.3	-27.5	40.2	39.52	H
16900.000	56.4	-27.0	41.6	41.74	V
17230.550	56.2	-26.6	41.5	41.28	H

Channel 48

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
3565.800	45.0	-35.1	33.2	47.01	H
3770.600	44.7	-34.7	33.3	46.15	H
10479.850	47.3	-31.5	37.6	41.14	H
15720.250	52.3	-27.5	40.4	39.42	V
16933.550	56.8	-27.0	41.6	42.25	V
17054.550	56.3	-26.4	41.6	41.03	H





Channel 52

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
4357.000	46.8	-34.1	33.9	47.09	H
4416.200	45.3	-34.8	33.9	46.20	H
10520.000	47.7	-32.0	37.6	42.07	V
15780.000	52.9	-27.6	40.4	40.03	H
17012.300	56.1	-26.6	41.7	41.00	V
17649.850	56.6	-26.5	41.2	41.91	V

Channel 56

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5672.800	46.5	-32.6	34.7	44.38	H
5717.600	46.7	-33.5	34.8	45.37	H
10560.000	48.5	-30.7	37.6	41.51	V
15840.000	53.0	-27.5	40.5	40.02	V
16973.530	56.6	-26.9	41.7	41.84	H
17049.150	56.0	-26.4	41.7	40.78	H

Channel 64

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5354.610	45.7	-34.5	34.4	45.77	H
5367.375	45.3	-34.2	34.4	45.07	V
10640.000	47.9	-29.0	37.7	39.22	H
15960.000	52.8	-27.1	40.7	39.28	H
16972.530	56.4	-26.9	41.7	41.64	H
17042.760	56.1	-26.4	41.7	40.88	H

Channel 100

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5453.995	45.7	-33.1	34.5	44.36	H
5456.445	45.4	-33.2	34.5	44.08	H
11000.150	49.1	-30.1	37.8	41.47	H
16500.150	52.9	-27.0	41.3	38.56	V
16920.350	56.3	-27.0	41.6	41.70	H
16977.550	57.0	-26.9	41.7	42.19	H

Channel 120

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
3662.400	45.5	-35.7	33.2	47.94	H
3759.200	45.6	-34.7	33.3	47.05	H
11200.000	48.0	-30.3	38.0	40.35	H
16800.000	54.4	-26.8	41.5	39.68	H
17396.800	56.8	-26.5	41.3	41.99	V
17619.400	56.1	-26.5	41.2	41.35	H

Channel 144

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5729.755	48.0	-33.7	34.8	46.83	H
5735.975	48.1	-33.8	34.8	47.10	H
11400.000	49.3	-30.4	38.1	41.54	V
17100.200	53.7	-26.1	41.6	38.21	V
17304.860	56.1	-26.8	41.4	41.51	H
17622.800	55.9	-26.5	41.2	41.15	V

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Channel 38

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5131.795	46.8	-35.0	34.2	47.63	H
5147.775	46.7	-34.8	34.2	47.30	H
10379.750	48.1	-29.7	37.5	40.32	V
15570.100	52.0	-27.6	40.2	39.38	V
16922.000	56.1	-27.0	41.6	41.46	V
17036.400	56.3	-26.5	41.7	41.09	H

Channel 46

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
3745.400	45.2	-34.7	33.3	46.67	H
5691.600	46.4	-33.0	34.8	44.63	H
10460.050	48.2	-30.9	37.6	41.55	V
15690.000	52.1	-27.4	40.3	39.23	V
16791.650	56.1	-26.8	41.5	41.32	V
17902.100	56.7	-26.2	41.3	41.54	V



Channel 54

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5697.200	47.4	-33.1	34.8	45.71	H
5746.400	46.9	-34.0	34.9	46.09	H
10540.000	47.9	-31.3	37.6	41.62	V
15810.000	52.9	-27.6	40.5	40.06	H
16971.680	56.7	-26.9	41.7	41.93	H
17048.590	56.1	-26.4	41.7	40.87	H

Channel 62

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5358.685	45.7	-34.4	34.4	45.71	H
5370.555	46.0	-34.1	34.4	45.73	H
10620.000	48.3	-28.8	37.6	39.47	V
15930.000	53.2	-27.2	40.6	39.79	H
16973.410	56.7	-26.9	41.7	41.89	V
17051.680	56.1	-26.4	41.6	40.79	V

Channel 102

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5455.825	45.8	-33.2	34.5	44.53	H
5457.310	46.6	-33.2	34.5	45.32	H
11020.000	49.5	-30.7	37.8	42.41	H
16530.000	54.9	-26.9	41.3	40.43	V
16968.230	57.0	-26.9	41.7	42.26	H
16892.850	57.2	-27.0	41.6	42.52	V

Channel 118

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
3749.800	45.2	-34.7	33.3	46.68	H
4403.800	45.5	-34.5	33.9	46.13	H
11180.000	51.0	-30.1	37.9	43.18	V
16770.000	54.1	-26.7	41.5	39.32	V
16969.750	56.0	-26.9	41.7	41.23	H
16893.460	56.0	-27.0	41.6	41.36	V



Channel 142

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5728.750	46.9	-33.7	34.8	45.75	H
5745.090	47.2	-34.0	34.9	46.34	H
11340.000	50.5	-30.5	38.1	42.95	V
17010.000	54.9	-26.6	41.7	39.85	H
16968.200	56.9	-26.9	41.7	42.13	V
16905.460	56.1	-27.0	41.6	41.45	V

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Channel 36

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5141.285	45.4	-34.9	34.2	46.08	V
5149.730	44.9	-34.8	34.2	45.44	H
10359.950	48.1	-30.0	37.5	40.58	V
15539.850	52.5	-27.6	40.1	40.03	H
16957.750	56.3	-27.0	41.7	41.57	H
17096.350	56.6	-26.1	41.6	41.11	V

Channel 40

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
6163.200	46.7	-32.5	35.3	43.85	H
6385.200	47.0	-32.7	35.5	44.23	V
10400.100	47.7	-29.4	37.5	39.59	H
15599.800	52.8	-27.5	40.2	40.03	V
16906.600	55.8	-27.0	41.6	41.15	V
17042.450	55.9	-26.4	41.7	40.67	V

Channel 48

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5694.000	46.0	-33.0	34.8	44.26	H
6188.000	46.2	-32.5	35.4	43.38	V
10479.850	47.5	-31.5	37.6	41.34	V
15720.250	52.3	-27.5	40.4	39.41	V
16870.850	56.1	-26.9	41.6	41.41	V
16982.500	56.0	-26.8	41.7	41.13	V



Channel 52

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5667.200	46.4	-32.7	34.7	44.35	H
6182.600	46.8	-32.5	35.3	43.91	H
10520.000	48.3	-32.0	37.6	42.66	V
15780.000	51.7	-27.6	40.4	38.82	V
16992.180	56.1	-26.8	41.7	41.18	V
17057.402	56.7	-26.3	41.6	41.43	V

Channel 56

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5666.600	47.2	-32.7	34.7	45.14	H
6400.600	47.0	-32.7	35.5	44.14	H
10560.000	48.4	-30.7	37.6	41.42	H
15840.000	53.1	-27.5	40.5	40.12	H
16973.460	56.6	-26.9	41.7	41.81	H
17044.863	56.1	-26.4	41.7	40.87	V

Channel 64

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5350.830	45.0	-34.6	34.4	45.14	H
5352.270	45.4	-34.5	34.4	45.53	H
10640.000	47.9	-29.0	37.7	39.23	V
15960.000	52.8	-27.1	40.7	39.24	V
16973.480	56.4	-26.9	41.7	41.59	V
17046.860	56.2	-26.4	41.7	40.96	V

Channel 100

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5455.120	45.6	-33.2	34.5	44.29	H
5458.835	45.5	-33.2	34.5	44.25	H
11000.000	48.4	-30.1	37.8	40.74	H
16500.000	53.3	-27.0	41.3	39.05	V
17261.000	56.2	-26.7	41.4	41.45	H
17089.780	56.5	-26.1	41.6	41.02	H

Channel 120

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
4357.000	50.0	-34.1	33.9	50.26	H
4414.600	51.3	-34.8	33.9	52.10	H
11200.000	48.0	-30.3	38.0	40.35	V
16800.000	54.4	-26.8	41.5	39.68	H
17496.200	56.8	-26.3	41.2	41.91	H
17618.700	56.1	-26.5	41.2	41.35	V

Channel 144

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5725.255	48.5	-33.6	34.8	47.31	H
5728.375	48.3	-33.7	34.8	47.17	H
11400.000	49.2	-30.4	38.1	41.44	H
17100.200	53.7	-26.1	41.6	38.14	H
17304.860	56.2	-26.8	41.4	41.64	H
17622.800	55.9	-26.5	41.2	41.17	H

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Channel 38

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5141.285	46.1	-34.9	34.2	46.74	H
5145.900	46.1	-34.8	34.2	46.71	H
10379.750	47.9	-29.7	37.5	40.07	H
15570.100	52.1	-27.6	40.2	39.52	V
16888.450	56.3	-27.0	41.6	41.61	V
17007.800	56.5	-26.7	41.7	41.49	V

Channel 46

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
3611.400	44.9	-35.5	33.2	47.16	H
3816.600	44.9	-35.4	33.4	46.92	H
10460.050	47.4	-30.9	37.6	40.75	V
15690.000	51.9	-27.4	40.3	39.05	H
16937.950	57.3	-27.1	41.7	42.66	V
17120.550	56.1	-26.0	41.6	40.56	H



Channel 54

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5697.200	47.4	-33.1	34.8	45.71	H
5746.400	46.9	-34.0	34.9	46.09	H
10540.000	47.9	-31.3	37.6	41.62	V
15810.000	52.9	-27.6	40.5	40.06	H
16971.680	56.7	-26.9	41.7	41.93	H
17048.590	56.1	-26.4	41.7	40.87	H

Channel 62

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5358.685	45.7	-34.4	34.4	45.71	H
5370.555	46.0	-34.1	34.4	45.73	H
10620.000	48.3	-28.8	37.6	39.47	V
15930.000	53.2	-27.2	40.6	39.79	H
16973.410	56.7	-26.9	41.7	41.89	V
17051.680	56.1	-26.4	41.6	40.79	V

Channel 102

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5455.825	45.8	-33.2	34.5	44.53	H
5457.310	46.6	-33.2	34.5	45.32	H
11020.000	49.5	-30.7	37.8	42.41	H
16530.000	54.9	-26.9	41.3	40.43	V
16968.230	57.0	-26.9	41.7	42.26	H
16892.850	57.2	-27.0	41.6	42.52	V

Channel 118

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
3749.800	45.2	-34.7	33.3	46.68	H
4403.800	45.5	-34.5	33.9	46.13	H
11180.000	51.0	-30.1	37.9	43.18	V
16770.000	54.1	-26.7	41.5	39.32	V
16969.750	56.0	-26.9	41.7	41.23	H
16893.460	56.0	-27.0	41.6	41.36	V

Channel 142



Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5728.750	46.9	-33.7	34.8	45.75	H
5745.090	47.2	-34.0	34.9	46.34	H
11340.000	50.5	-30.5	38.1	42.95	V
17010.000	54.9	-26.6	41.7	39.85	H
16968.200	56.9	-26.9	41.7	42.13	V
16905.460	56.1	-27.0	41.6	41.45	V

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Channel 42

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5139.580	59.0	-34.9	34.2	59.73	H
5145.455	59.2	-34.8	34.2	59.82	V
10420.000	48.3	-29.8	37.5	40.54	V
15630.000	53.2	-27.4	40.3	40.38	V
16959.328	56.6	-27.0	41.7	41.90	V
17064.476	56.1	-26.3	41.6	40.80	V

Channel 58

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5350.475	48.0	-34.6	34.4	48.13	H
5351.195	48.0	-34.5	34.4	48.17	V
10580.000	48.3	-30.0	37.6	40.63	H
15870.000	53.3	-27.4	40.5	40.18	H
16956.480	56.0	-27.0	41.7	41.34	H
17059.380	56.2	-26.3	41.6	40.91	V

Channel 106

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P <sub>Mea</sub> (dBuV/m)	Polarization
5452.670	47.6	-33.1	34.5	46.24	H
5455.200	48.4	-33.2	34.5	47.08	V
11060.000	48.3	-31.3	37.8	41.74	V
16590.000	53.3	-26.6	41.4	38.57	H
16967.580	56.5	-26.9	41.7	41.74	V
17062.760	56.2	-26.3	41.6	40.85	V

Sample calculation: 802.11ac 80MHz CH106–Peak, 5455.200 MHz

Peak ERP(dBm) = P<sub>Mea</sub>(47.1 dBuV/m) + Cable Loss(-33.2) + Antenna Factor(34.5) = 48.4 dBuV/m



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

**Test Condition:**

<b>Voltage (V)</b>	<b>Frequency (Hz)</b>
110	60

**Measurement uncertainty:**

Expanded measurement uncertainty for this test item is U =3.08dB, k=2.

**Measurement Result and limit:**

WLAN (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Result (dBμV)		Conclusion
		With charger		
		11a mode	Idle	
0.15 to 0.5	66 to 56	Fig.70	Fig.71	P
0.5 to 5	56			
5 to 30	60			

NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

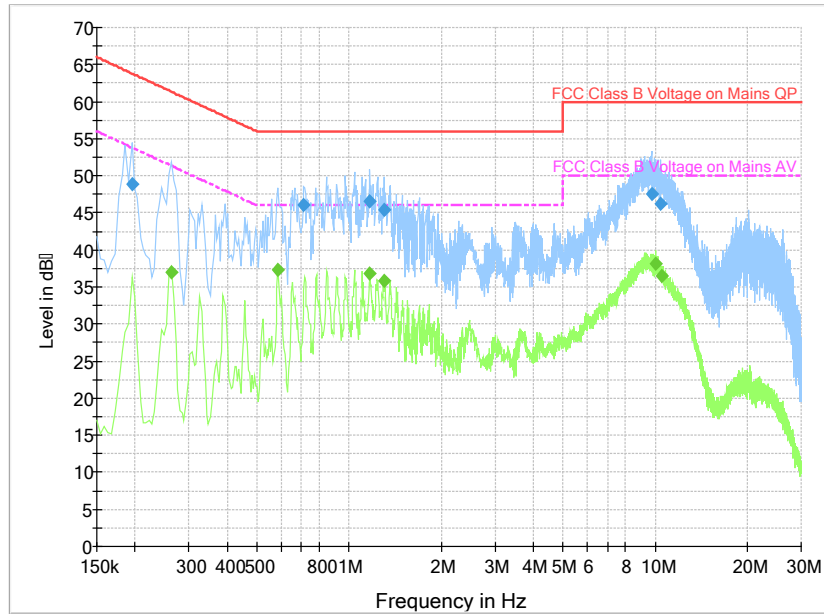
WLAN (Average Limit)

Frequency range (MHz)	Average Limit (dBμV)	Result (dBμV)		Conclusion
		With charger		
		11a mode	Idle	
0.15 to 0.5	56 to 46	Fig.70	Fig.71	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:**



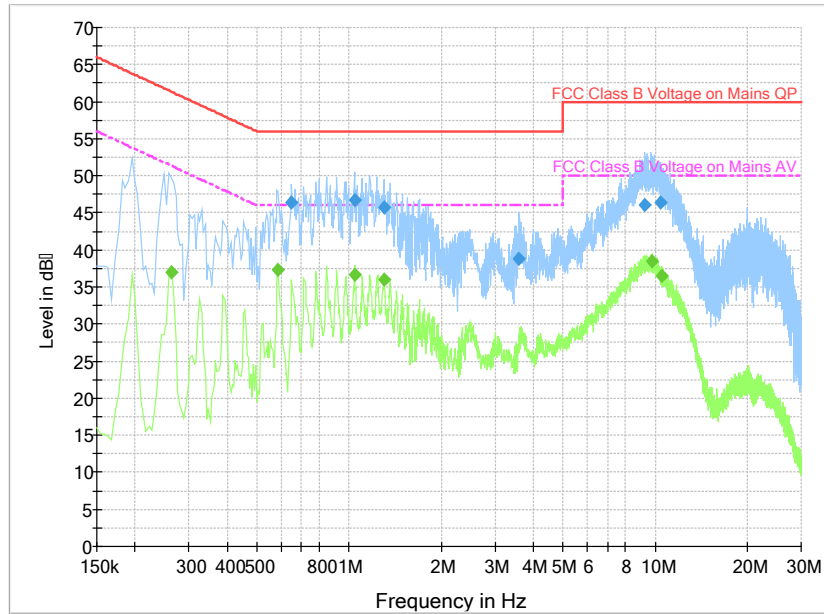
**Fig. 70 Conducted Emission(802.11a, Ch40, TX)**

Measurement Result:

Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.195000	48.9	2000.0	9.000	On	L1	19.8	14.9	63.8
0.712500	46.1	2000.0	9.000	On	L1	19.8	9.9	56.0
1.171500	46.5	2000.0	9.000	On	L1	19.6	9.5	56.0
1.302000	45.4	2000.0	9.000	On	L1	19.6	10.6	56.0
9.726000	47.6	2000.0	9.000	On	L1	19.8	12.4	60.0
10.441500	46.3	2000.0	9.000	On	L1	19.8	13.7	60.0

Measurement Result:

Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.262500	37.0	2000.0	9.000	On	N	19.8	14.3	51.4
0.586500	37.3	2000.0	9.000	On	N	19.9	8.7	46.0
1.171500	36.8	2000.0	9.000	On	L1	19.6	9.2	46.0
1.302000	35.9	2000.0	9.000	On	L1	19.6	10.1	46.0
10.050000	38.2	2000.0	9.000	On	L1	19.8	11.8	50.0
10.558500	36.4	2000.0	9.000	On	L1	19.8	13.6	50.0



**Fig. 71 Conducted Emission(802.11a, IDLE)**

Measurement Result:

Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.649500	46.4	2000.0	9.000	On	L1	19.8	9.6	56.0
1.041000	46.7	2000.0	9.000	On	L1	19.6	9.3	56.0
1.297500	45.8	2000.0	9.000	On	L1	19.6	10.2	56.0
3.597000	38.8	2000.0	9.000	On	L1	19.6	17.2	56.0
9.240000	46.1	2000.0	9.000	On	L1	19.8	13.9	60.0
10.428000	46.4	2000.0	9.000	On	L1	19.8	13.6	60.0

Measurement Result:

Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.262500	37.0	2000.0	9.000	On	N	19.8	14.3	51.4
0.586500	37.4	2000.0	9.000	On	N	19.9	8.6	46.0
1.041000	36.6	2000.0	9.000	On	L1	19.6	9.4	46.0
1.297500	36.0	2000.0	9.000	On	L1	19.6	10.0	46.0
9.726000	38.5	2000.0	9.000	On	L1	19.8	11.5	50.0
10.513500	36.6	2000.0	9.000	On	L1	19.8	13.5	50.0



**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% of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the total is reached; that frequency is recorded as the upper frequency. The 99% power bandwidth is the difference between these two frequencies.
- h) The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

**Measurement Uncertainty:**

Measurement Uncertainty	60.80Hz
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**Measurement Result:**

Mode	Channel	99% Occupied bandwidth ( MHz)	conclusion
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802.11a	5180 MHz	Fig.72	16.56	P
	5200 MHz	Fig.73	16.72	P
	5240 MHz	Fig.74	16.53	P

802.11n HT20	5180 MHz	Fig.75	17.73	P
	5200 MHz	Fig.76	17.80	P
	5240 MHz	Fig.77	17.70	P

802.11ac	5180 MHz	Fig.78	17.83	P
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HT20	5200 MHz	Fig.79	17.82	P
	5240 MHz	Fig.80	17.74	P

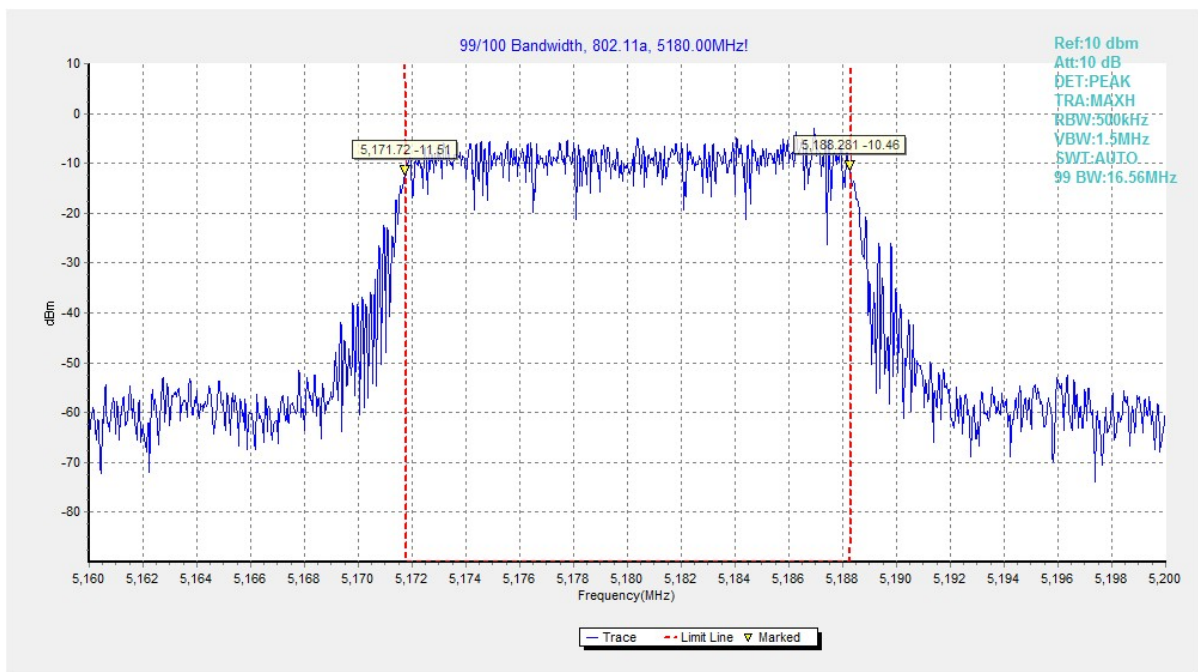
802.11n HT40	5190 MHz	Fig.81	35.94	P
	5230 MHz	Fig.82	36.06	P

802.11ac HT40	5190 MHz	Fig.83	35.92	P
	5230 MHz	Fig.84	36.12	P

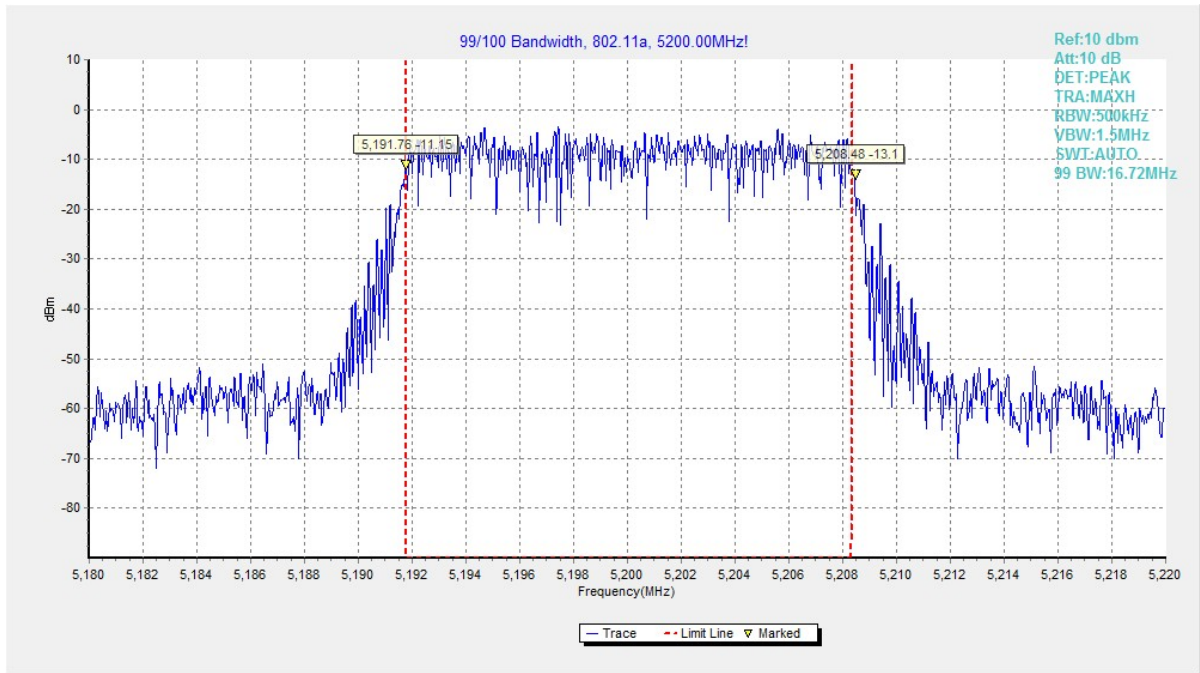
802.11ac HT80	5210 MHz	Fig.85	74.92	P
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**Conclusion: PASS**

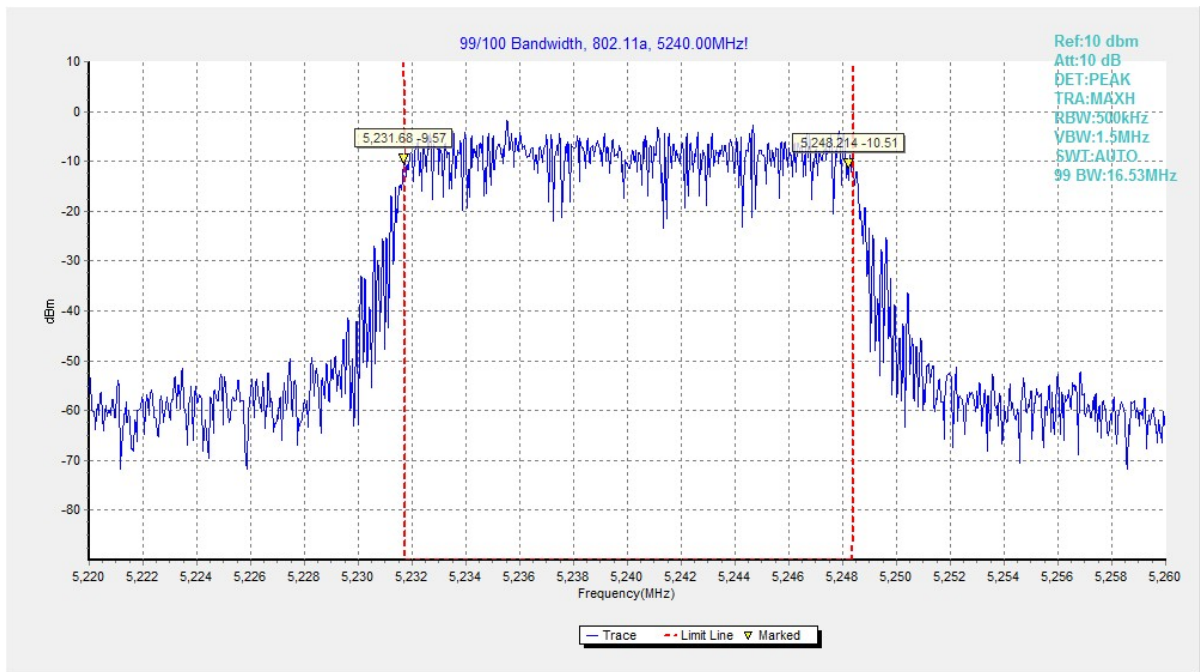
**Test graphs as below:**



**Fig. 72 99% Occupied bandwidth (802.11a, 5180MHz)**

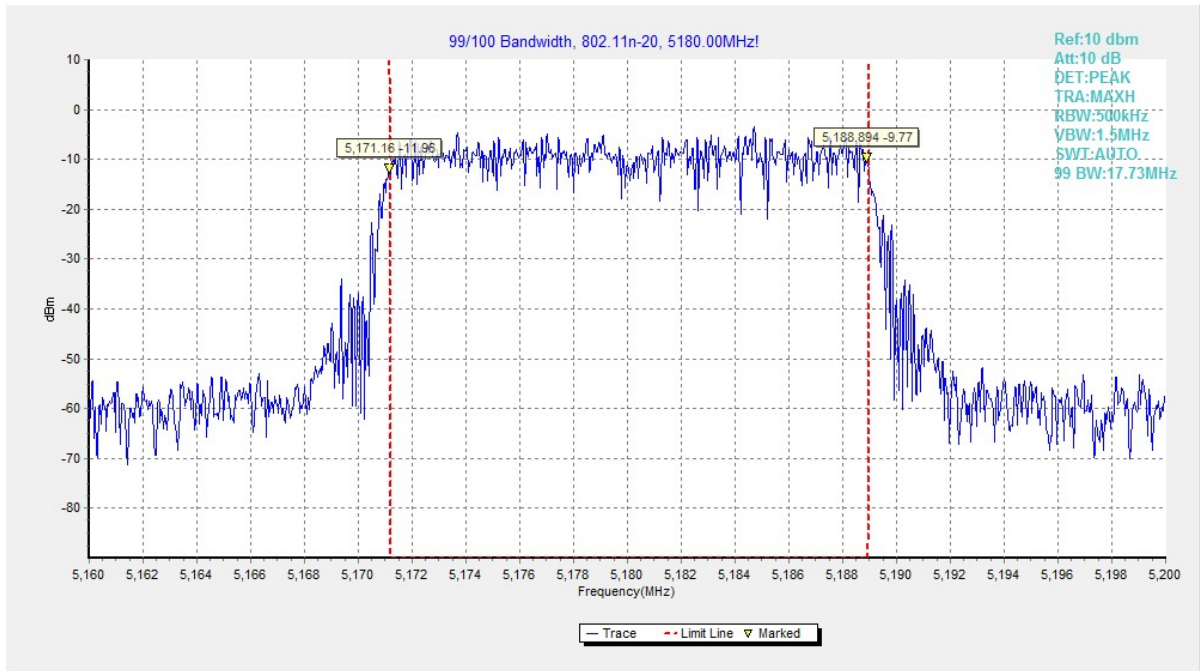


**Fig. 73 99% Occupied bandwidth (802.11a, 5200MHz)**

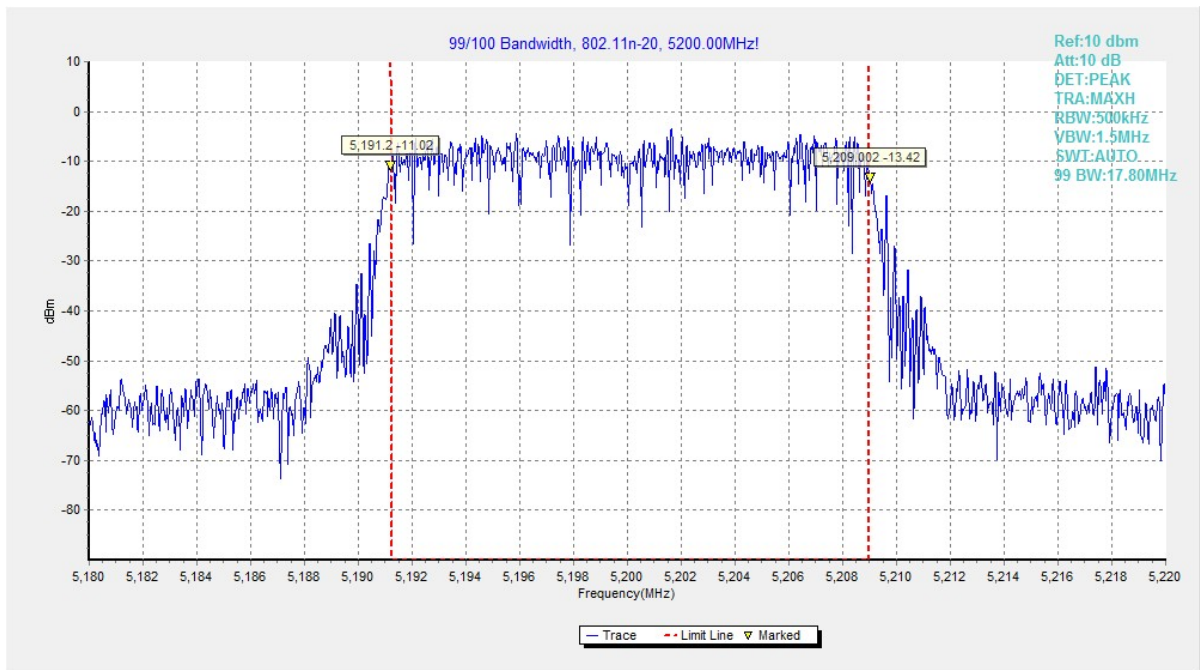


**Fig. 74 99% Occupied bandwidth (802.11a, 5240MHz)**

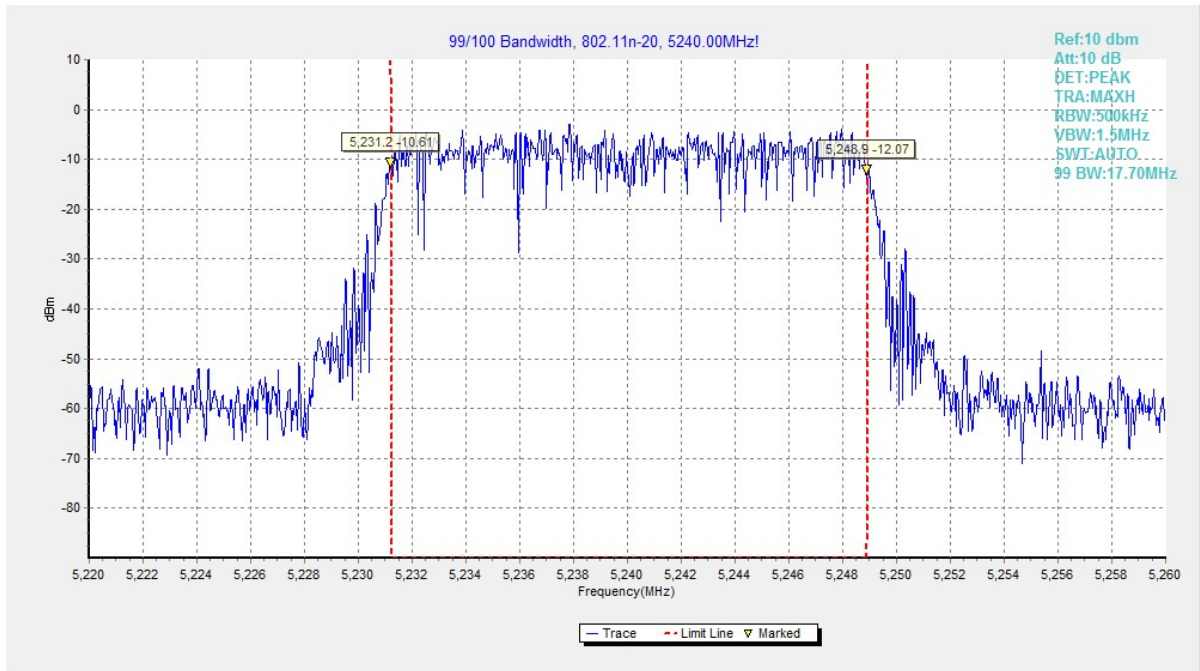




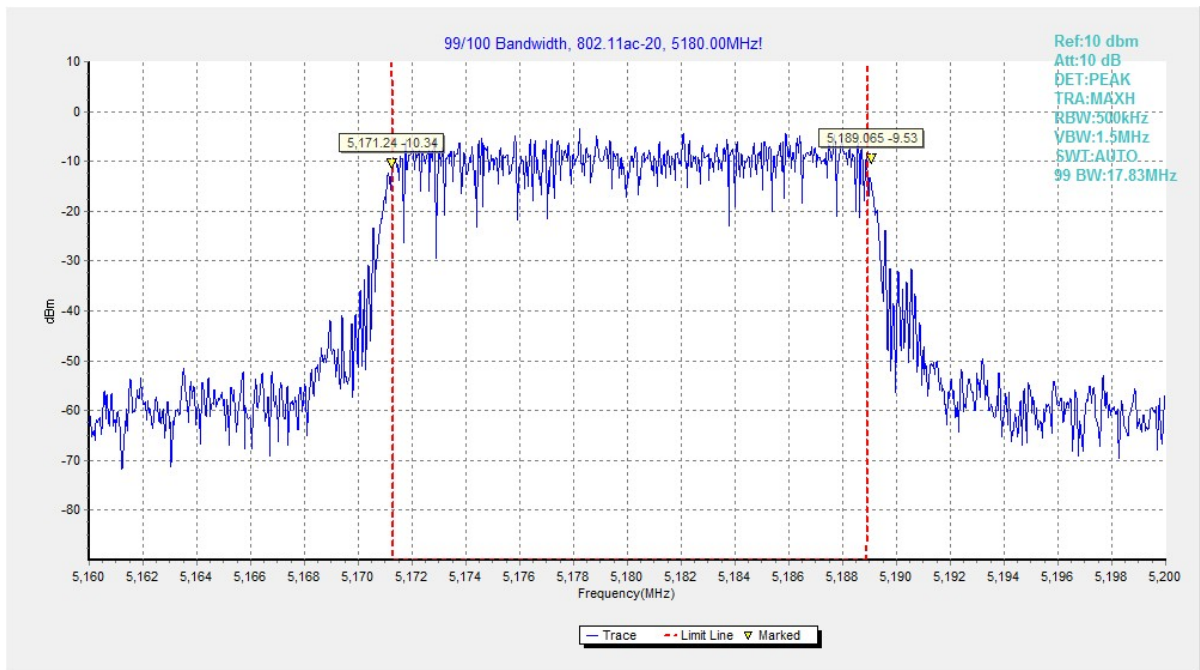
**Fig. 75 99% Occupied bandwidth (802.11n20, 5180MHz)**



**Fig. 76 99% Occupied bandwidth (802.11n20, 5200MHz)**

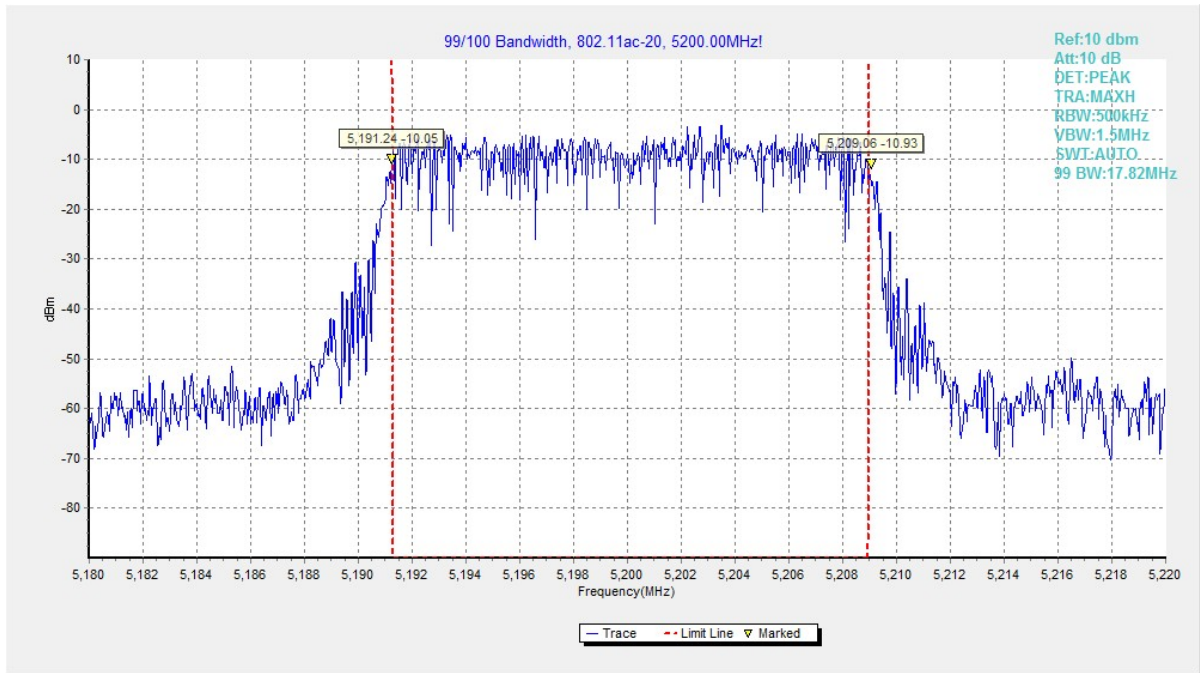


**Fig. 77 99% Occupied bandwidth (802.11n20, 5240MHz)**

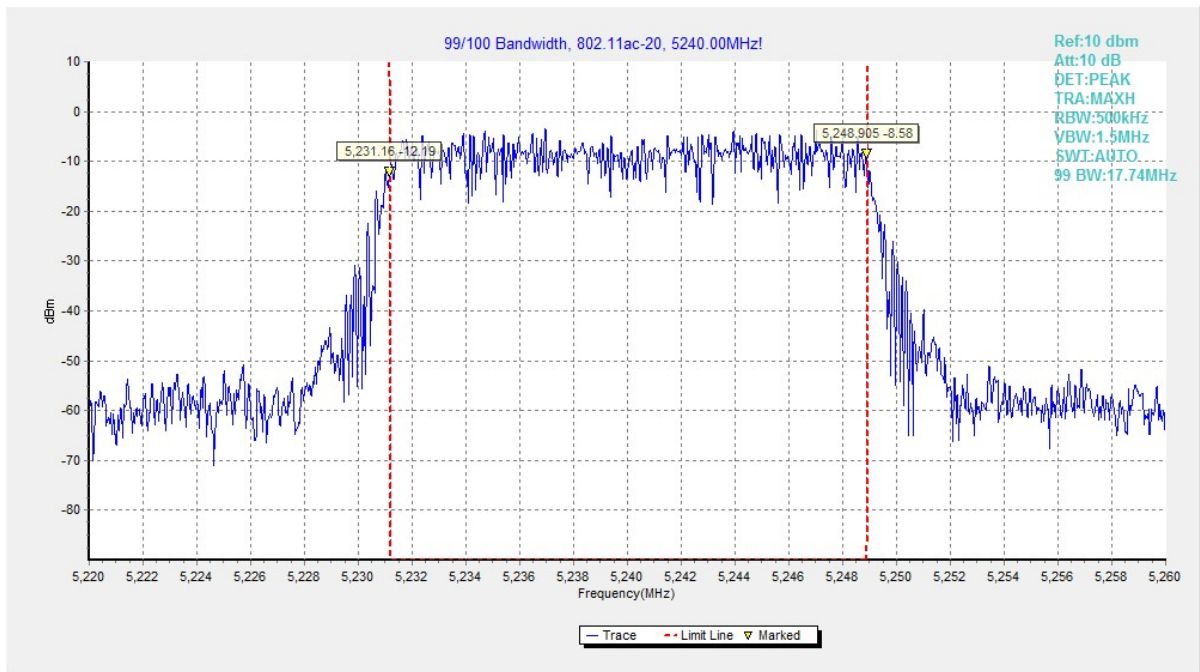


**Fig. 78 99% Occupied bandwidth (802.11ac20, 5180MHz)**

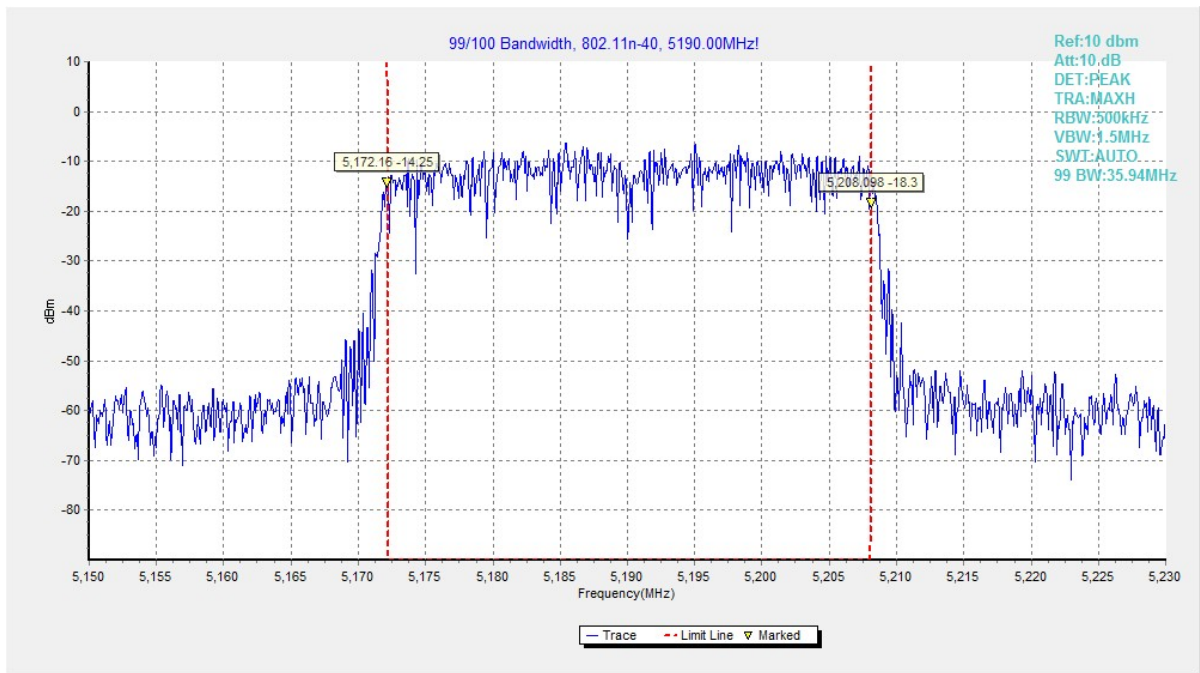




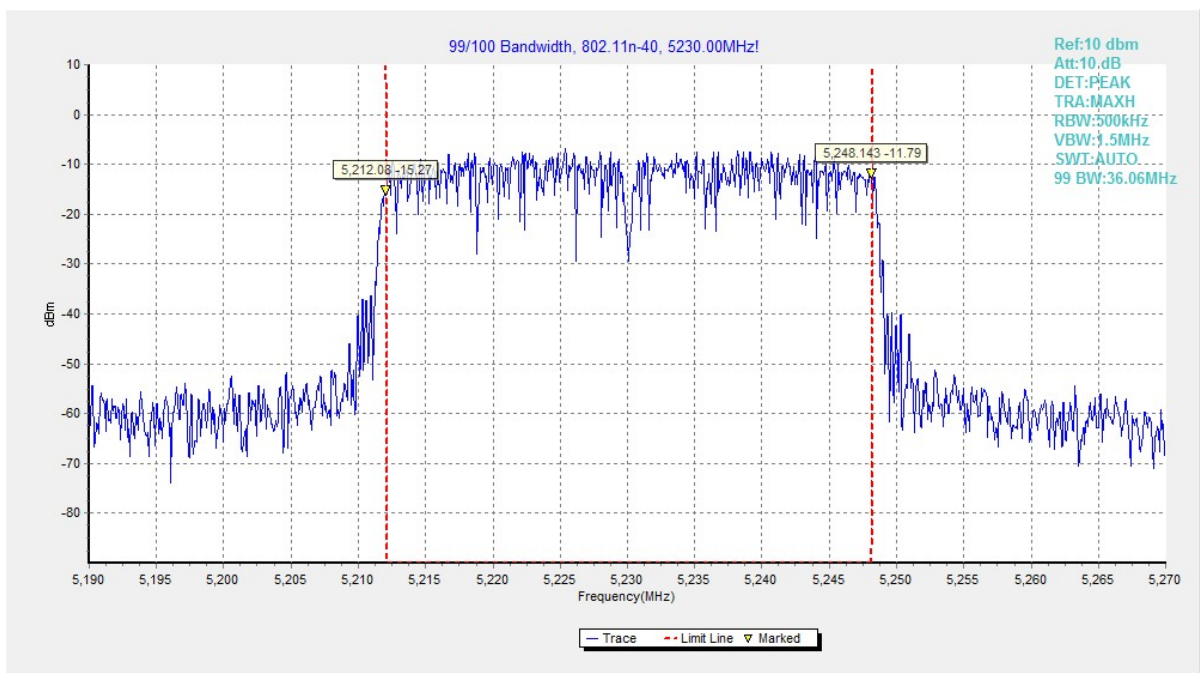
**Fig. 79 99% Occupied bandwidth (802.11ac20, 5200MHz)**



**Fig. 80 99% Occupied bandwidth (802.11ac20, 5240MHz)**



**Fig. 81** 99% Occupied bandwidth (802.11n40, 5190MHz)



**Fig. 82** 99% Occupied bandwidth (802.11n40, 5230MHz)