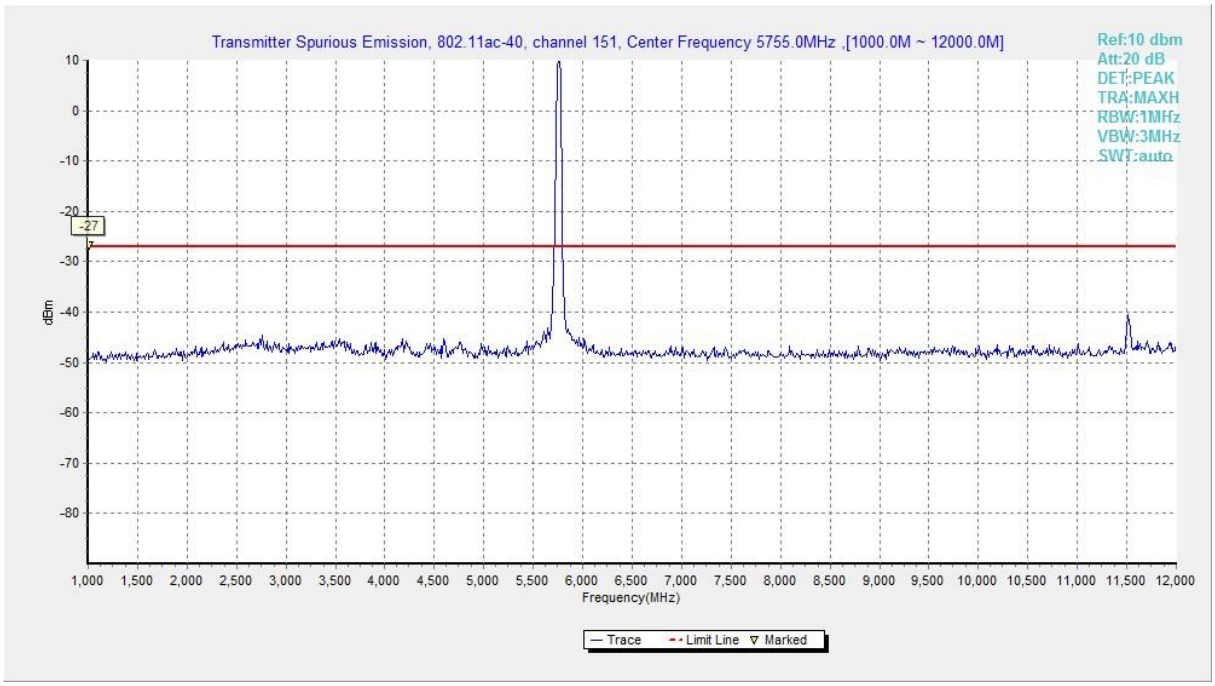


Fig. 60 Conducted Spurious Emission (802.11ac-HT40, Ch151, 1 GHz -12 GHz)

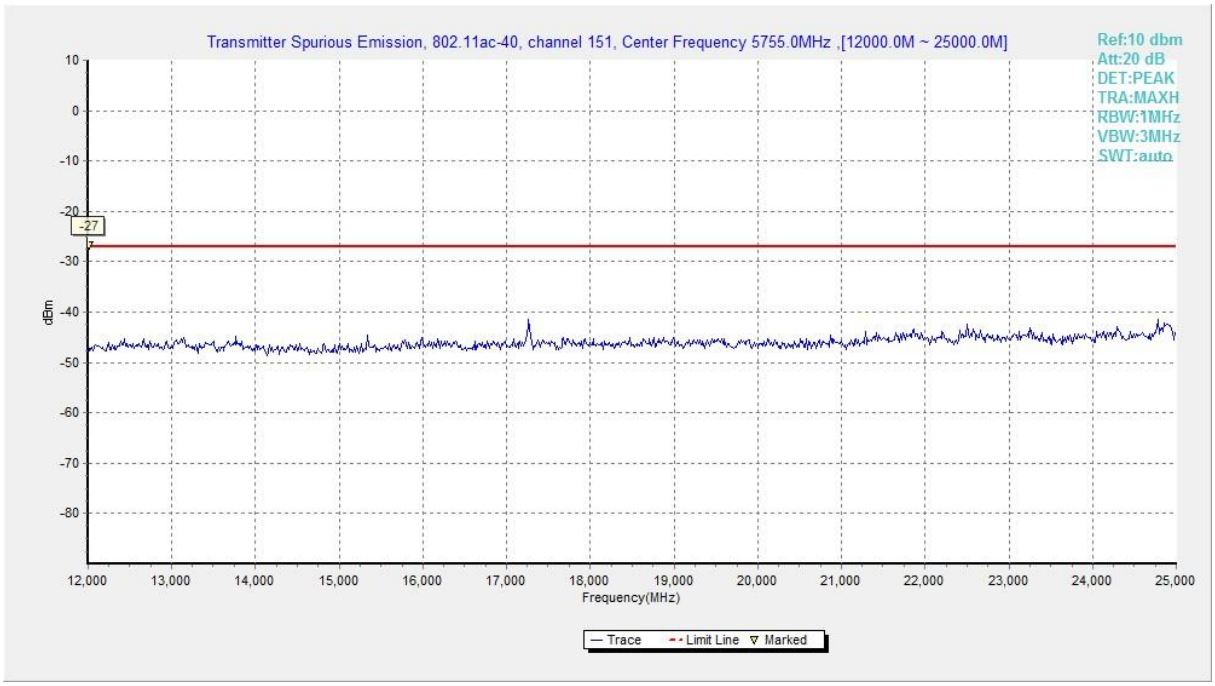


Fig. 61 Conducted Spurious Emission (802.11ac-HT40, Ch151, 12 GHz-25 GHz)

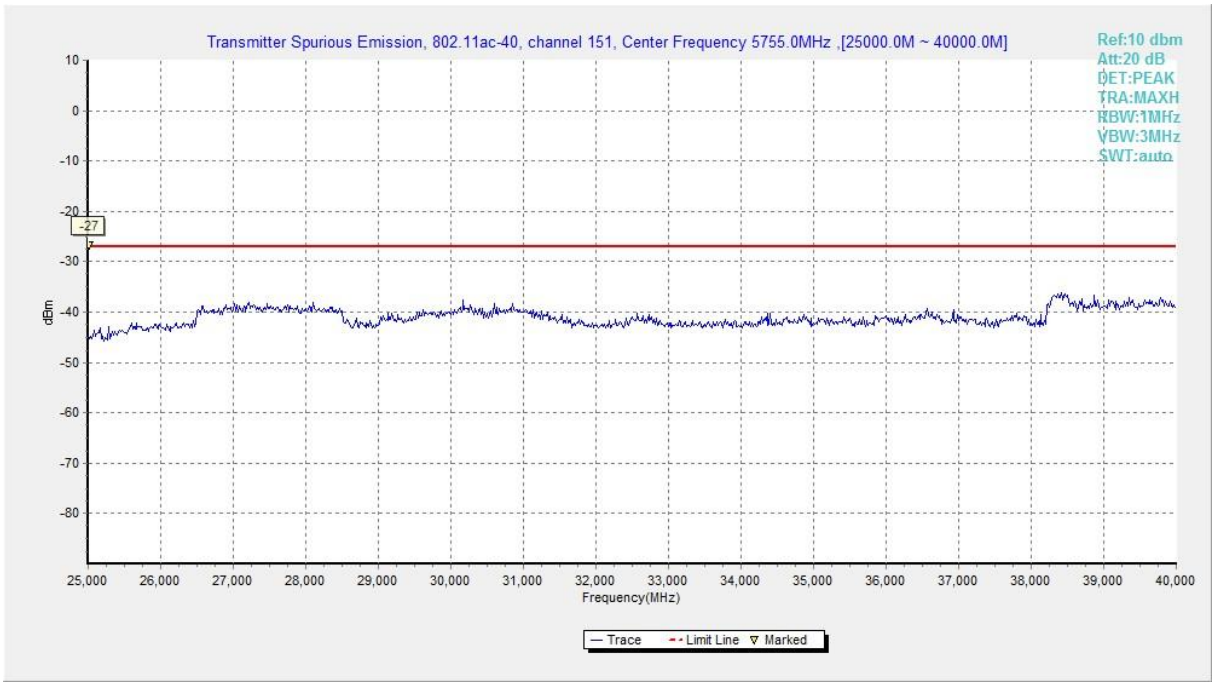


Fig. 62 Conducted Spurious Emission (802.11ac-HT40, Ch151, 25 GHz-40 GHz)

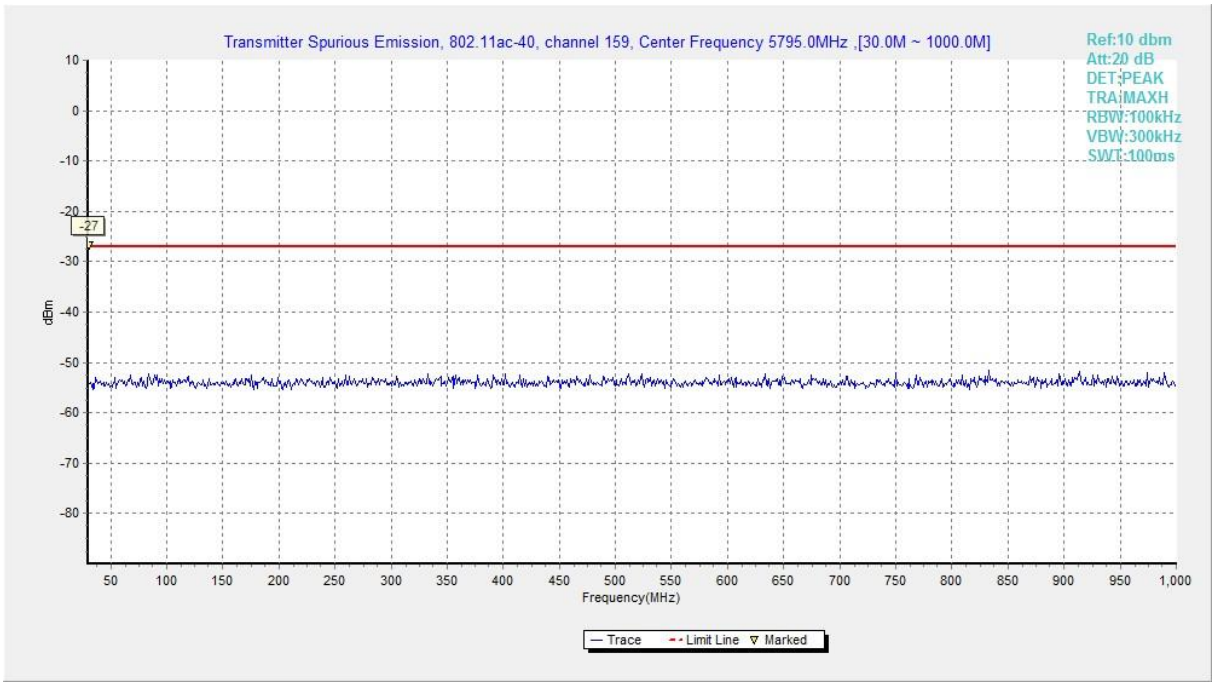


Fig. 63 Conducted Spurious Emission (802.11ac-HT40, Ch159, 30 MHz-1 GHz)

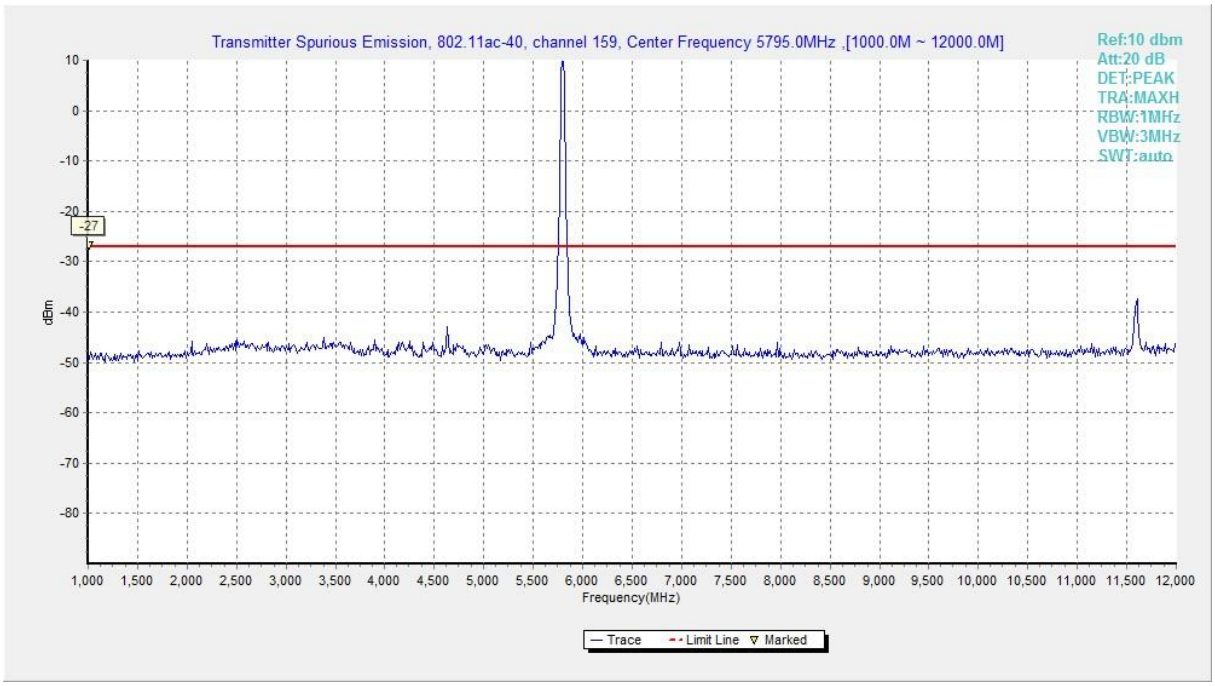


Fig. 64 Conducted Spurious Emission (802.11ac-HT40, Ch159, 1 GHz -12 GHz)

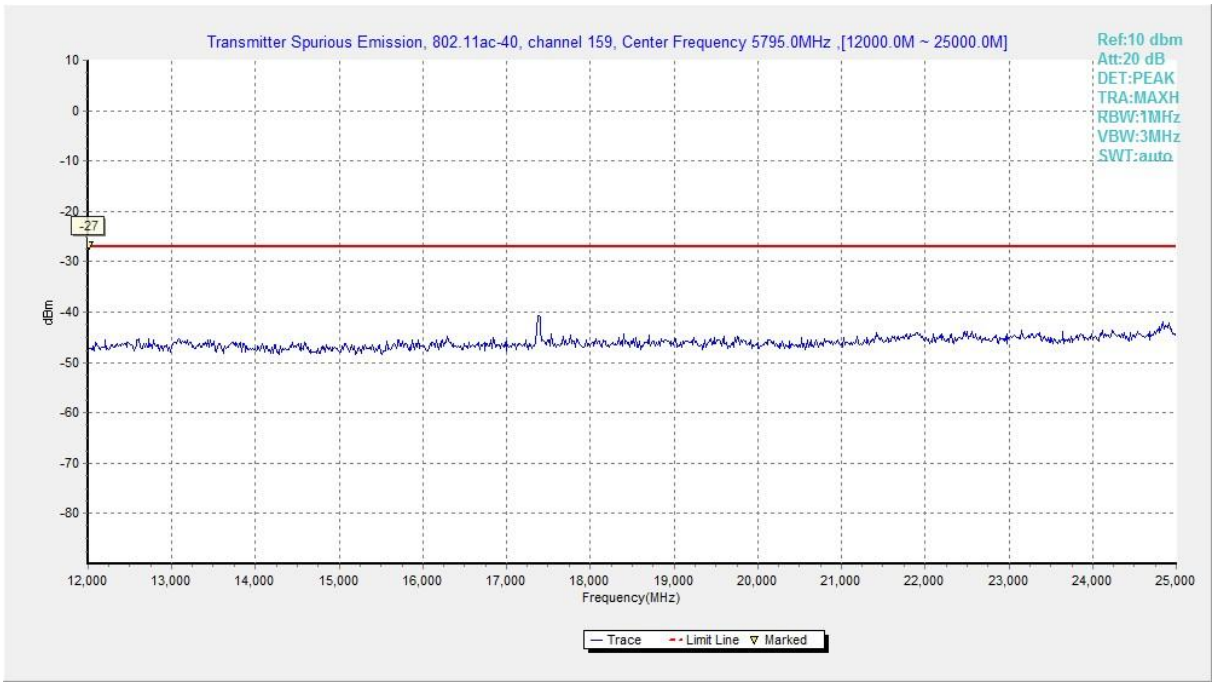


Fig. 65 Conducted Spurious Emission (802.11ac-HT40, Ch159, 12 GHz-25 GHz)

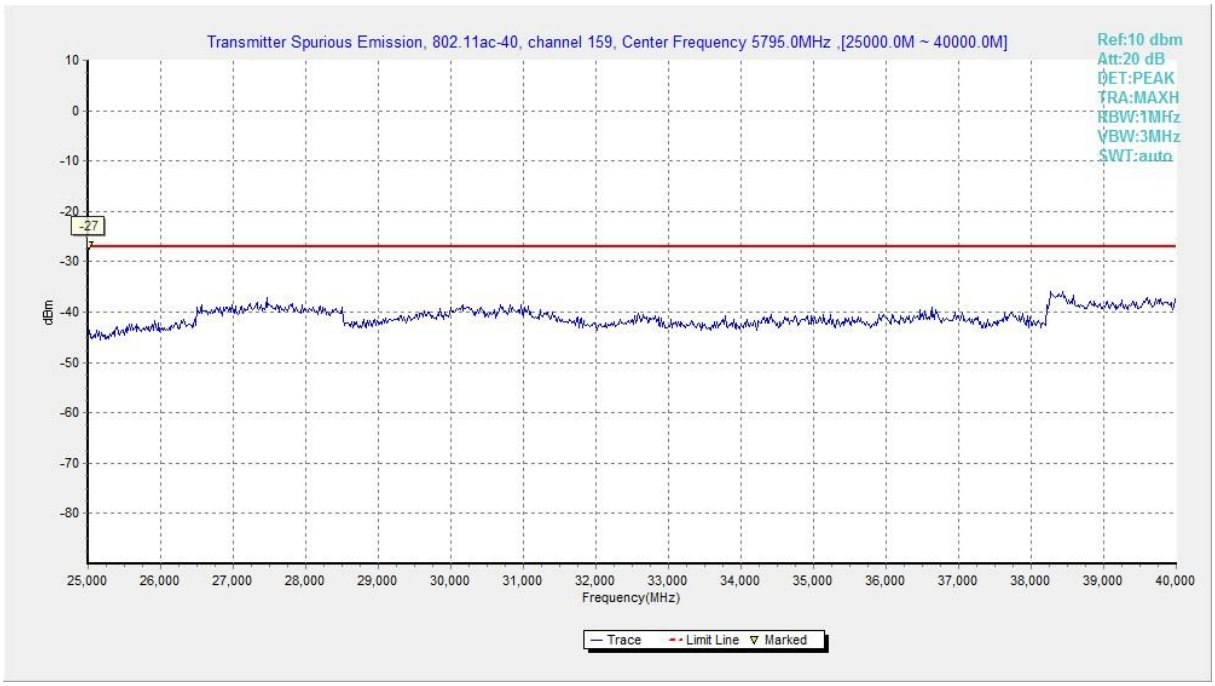


Fig. 66 Conducted Spurious Emission (802.11ac-HT40, Ch159, 25 GHz-40 GHz)

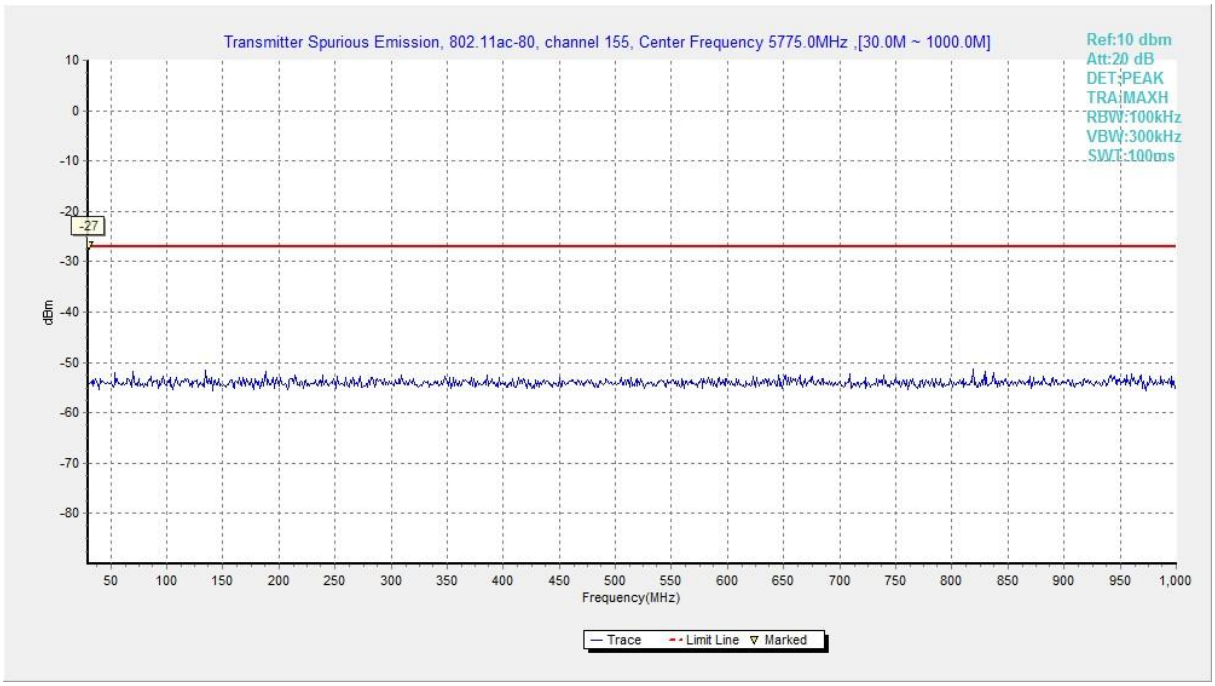


Fig. 67 Conducted Spurious Emission (802.11ac-HT80, Ch155, 30 MHz-1 GHz)

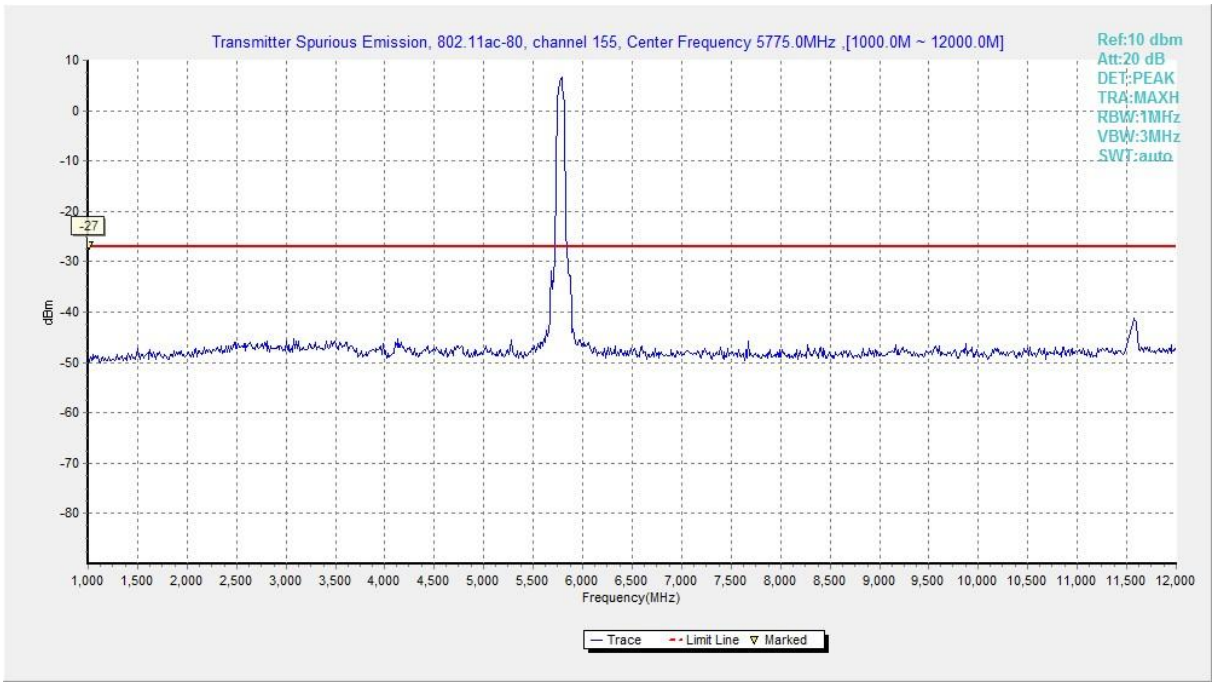


Fig. 68 Conducted Spurious Emission (802.11ac-HT80, Ch155, 1 GHz -12 GHz)

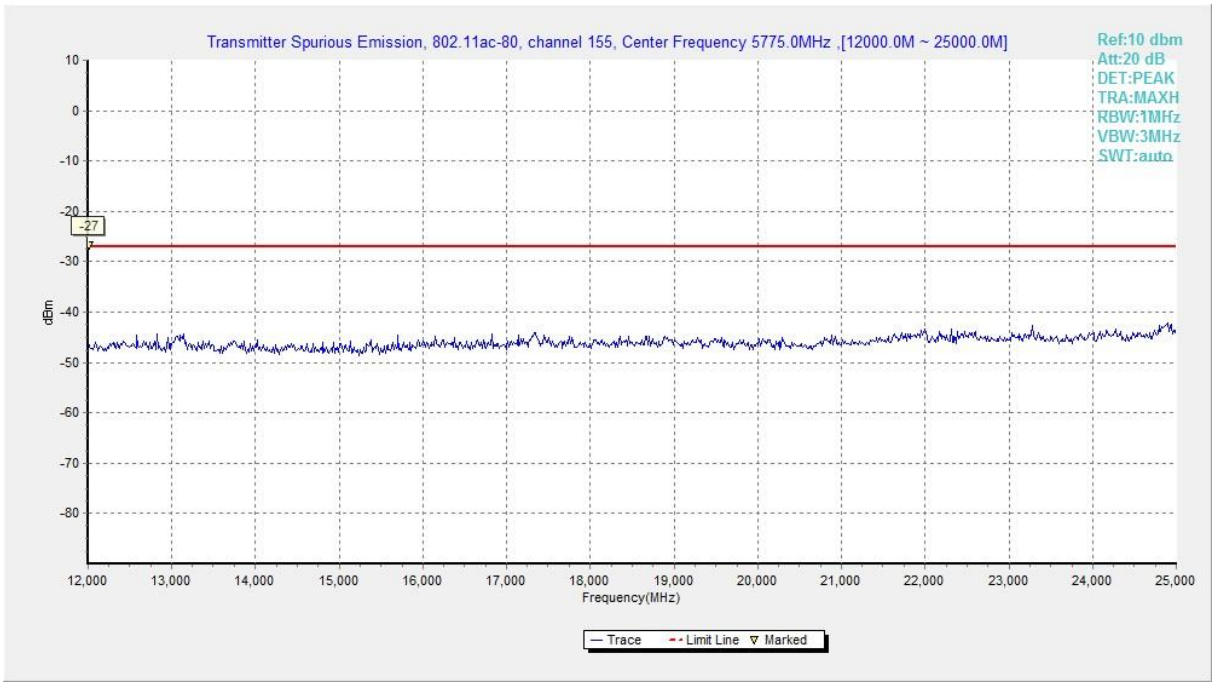


Fig. 69 Conducted Spurious Emission (802.11ac-HT80, Ch155, 12 GHz-25 GHz)

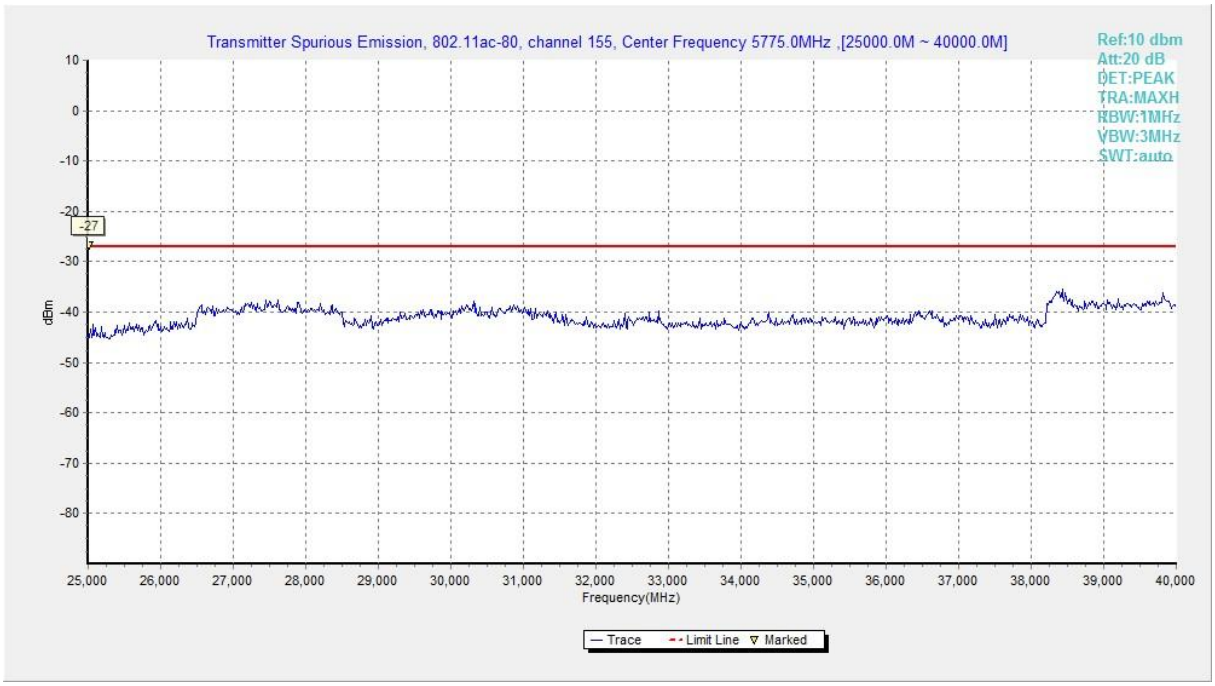


Fig. 70 Conducted Spurious Emission (802.11ac-HT80, Ch155, 25 GHz-40 GHz)

A.5.2 Transmitter Spurious Emission - Radiated

Measurement Uncertainty:

Frequency Range	Uncertainty(dB)
f ≤ 1GHz	3.9
f>1GHz	4.3

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.

802.11a

Ch149

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
5724.900	39.4	-33.0	34.9	37.47	V
5692.800	38.7	-32.7	34.9	36.50	H
11489.600	34.1	-30.4	38.7	25.80	V
17235.200	37.5	-25.8	41.2	22.10	H
17806.400	40.4	-23.0	41.0	22.49	V
17810.400	40.3	-23.0	41.0	22.36	H

Ch157

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
5736.000	39.0	-32.9	34.9	37.05	H
5824.400	38.2	-32.3	35.0	35.53	H
11570.400	33.9	-30.5	38.8	25.58	V
17355.200	37.7	-25.6	41.2	22.14	V
17803.200	40.3	-23.1	41.0	22.44	H
17807.200	40.4	-23.0	41.0	22.47	V

Ch165

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
5850.000	48.5	-32.2	35.1	45.62	V
5853.200	45.3	-32.2	35.1	42.41	V
11650.400	34.0	-30.2	38.9	25.27	H
17475.200	38.0	-25.2	41.2	22.05	H
17803.200	40.4	-23.1	41.0	22.54	V
17810.400	40.3	-23.0	41.0	22.36	V

802.11n-HT20

Ch149

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
5724.800	60.9	-33.0	34.9	58.97	H
5724.400	60.1	-33.0	34.9	58.17	V
11490.400	34.2	-30.4	38.7	25.90	H
17235.200	37.4	-25.8	41.2	22.00	V
17803.200	40.3	-23.1	41.0	22.44	H
17812.000	40.4	-23.0	41.0	22.48	H

Ch157

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
5724.800	39.0	-33.0	34.9	37.07	V
5827.600	38.0	-32.3	35.0	35.29	V
11570.400	33.8	-30.5	38.8	25.48	H
17354.400	37.7	-25.6	41.2	22.14	H
17806.400	40.3	-23.0	41.0	22.39	V
17808.800	40.3	-23.0	41.0	22.35	H

Ch165

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
5850.000	46.7	-32.2	35.1	43.82	H
5850.400	46.0	-32.2	35.1	43.12	V
11650.400	33.9	-30.2	38.9	25.17	H
17474.400	38.2	-25.2	41.2	22.24	V
17803.200	40.4	-23.1	41.0	22.54	H
17808.800	40.4	-23.0	41.0	22.45	V

802.11n-HT40

Ch151

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
5724.800	63.0	-33.0	34.9	61.07	H
5724.000	62.8	-33.0	34.9	60.86	V
11510.400	34.2	-30.4	38.7	25.90	H
17265.600	37.7	-25.9	41.2	22.40	V
17802.400	40.4	-23.1	41.0	22.55	H
17808.000	40.4	-23.0	41.0	22.46	V

Ch159

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
5850.000	39.5	-32.2	35.1	36.62	V
5852.800	39.1	-32.2	35.1	36.21	H
11590.400	33.7	-30.5	38.8	25.38	V
17384.800	37.9	-25.5	41.2	22.21	H
17802.400	40.4	-23.1	41.0	22.55	V
17809.600	40.4	-23.0	41.0	22.45	H

802.11ac-HT80

Ch155

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
5964.820	37.5	-32.6	34.8	35.29	H
6143.650	37.9	-32.1	35.2	34.82	V
11550.400	34.3	-30.5	38.8	25.99	H
17324.800	37.5	-25.8	41.2	22.08	H
17800.800	40.3	-23.1	41.0	22.47	V
17808.800	40.4	-23.0	41.0	22.45	H

A.6. Band Edges Compliance

A6.1 Band Edges - conducted

Measurement Limit:

Standard	Frequency (MHz)	Limit (dBm/MHz)
FCC 47 CFR Part 15.407（b）（4）	5715MHz~5860MHz	< -17
	Below 5715MHz, Above5860MHz	< -27

The measurement is made according to KDB 789033 D02

Measurement Uncertainty:

Measurement Uncertainty	0.75dB

Measurement Result:

Mode	Channel	Test Results	Conclusion
802.11a	5745 MHz	Fig.71	P
	5825 MHz	Fig.72	P
802.11n HT20	5745 MHz	Fig.73	P
	5825 MHz	Fig.74	P
802.11n HT20	5745 MHz	Fig.75	P
	5825 MHz	Fig.76	P
802.11n HT40	5755 MHz	Fig.77	P
	5795 MHz	Fig.78	P
802.11n HT40	5755 MHz	Fig.79	P
	5795 MHz	Fig.80	P
802.11ac HT80	5775 MHz	Fig.81	P
	5775 MHz	Fig.82	P

Conclusion: PASS

Test graphs as below:

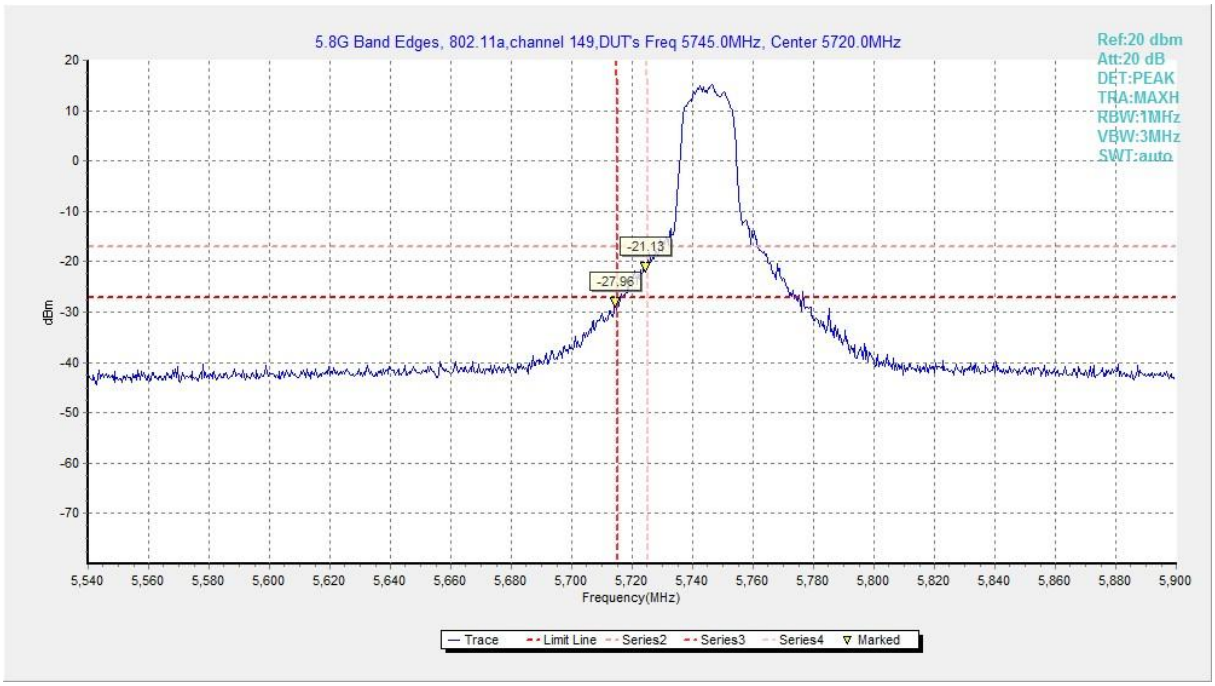


Fig. 71 Band Edges (802.11a, 5745MHz)

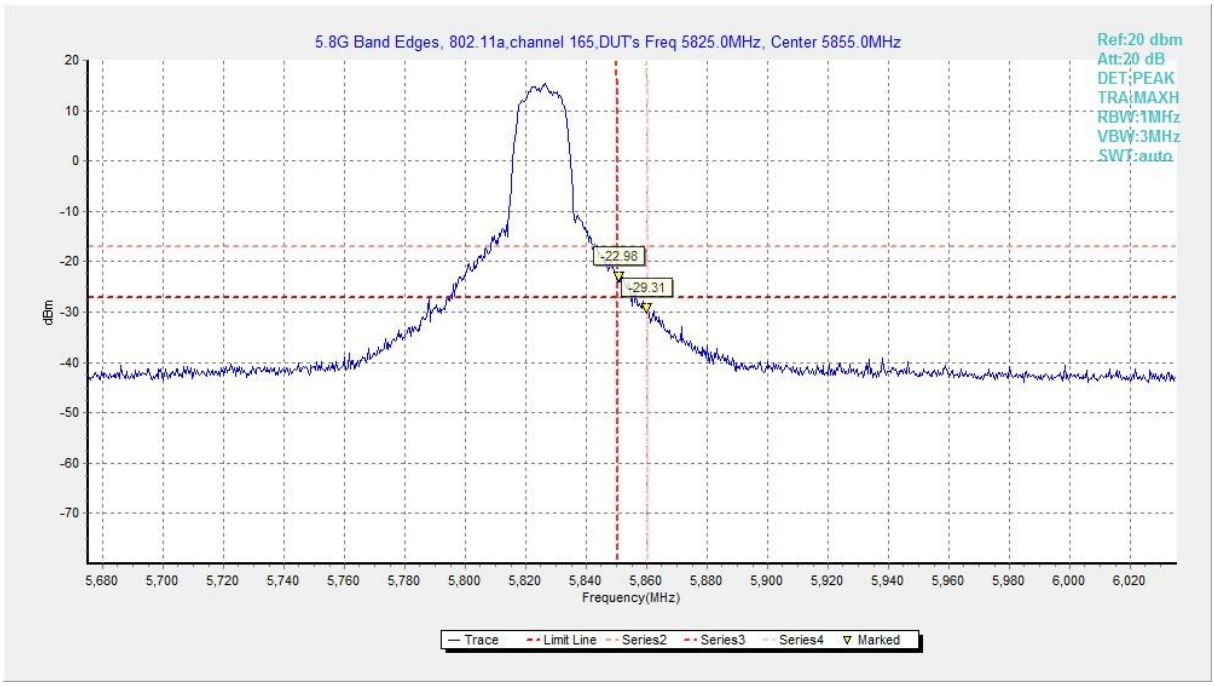


Fig. 72 Band Edges (802.11a, 5825MHz)

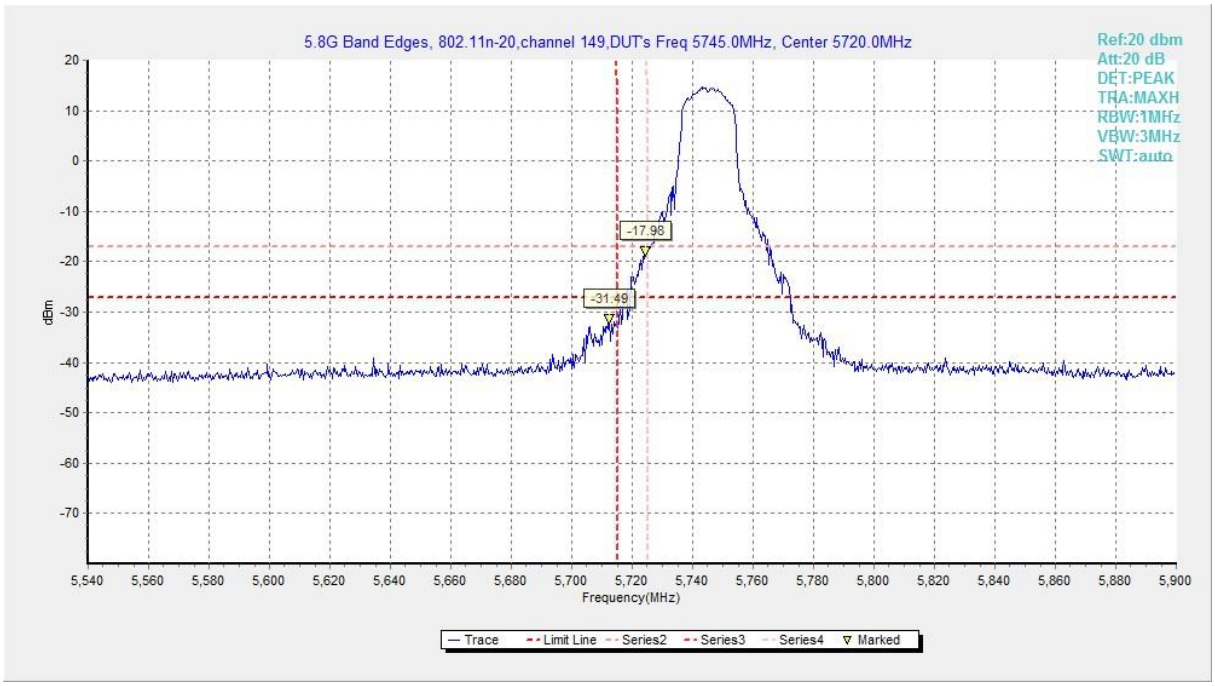


Fig. 73 Band Edges (802.11n-HT20, 5745MHz)

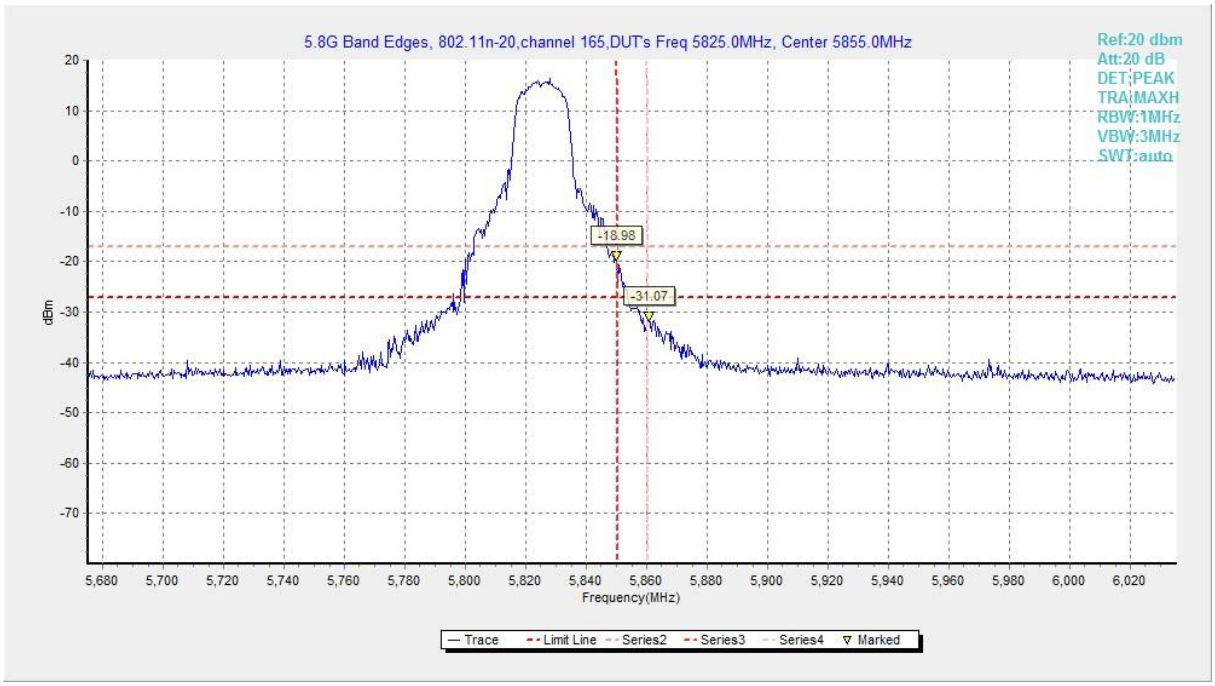


Fig. 74 Band Edges (802.11n-HT20, 5825MHz)

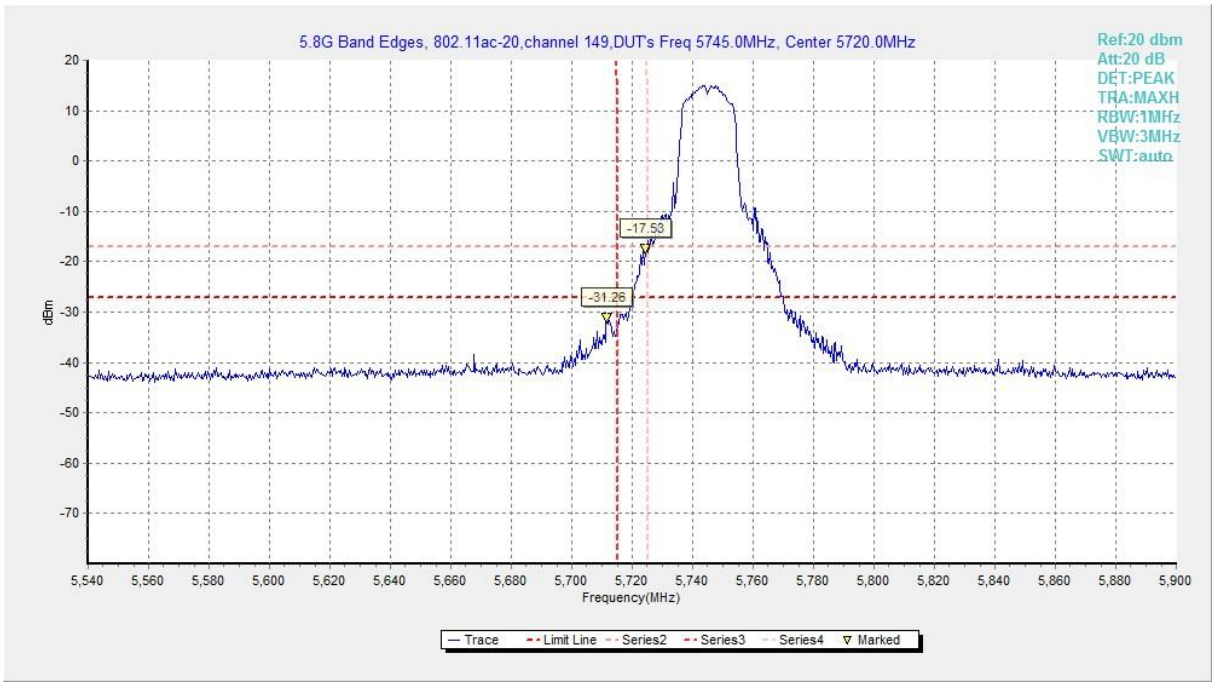


Fig. 75 Band Edges (802.11ac-HT20, 5745MHz)

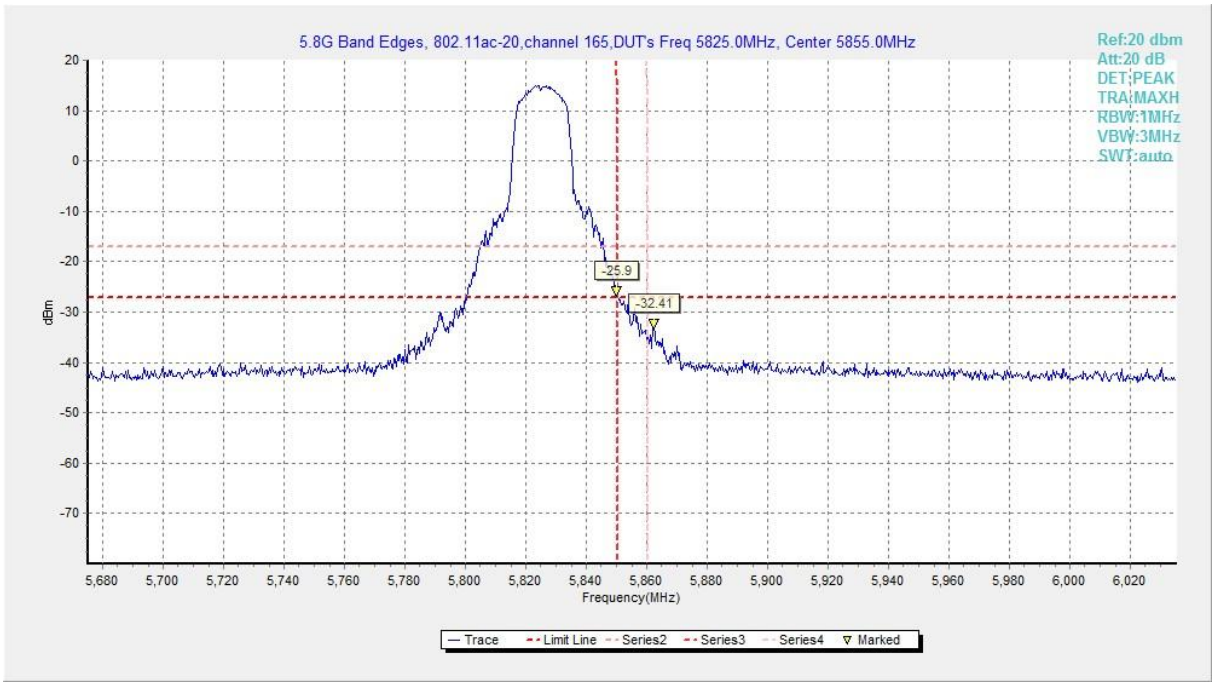


Fig. 76 Band Edges (802.11ac-HT20, 5825MHz)

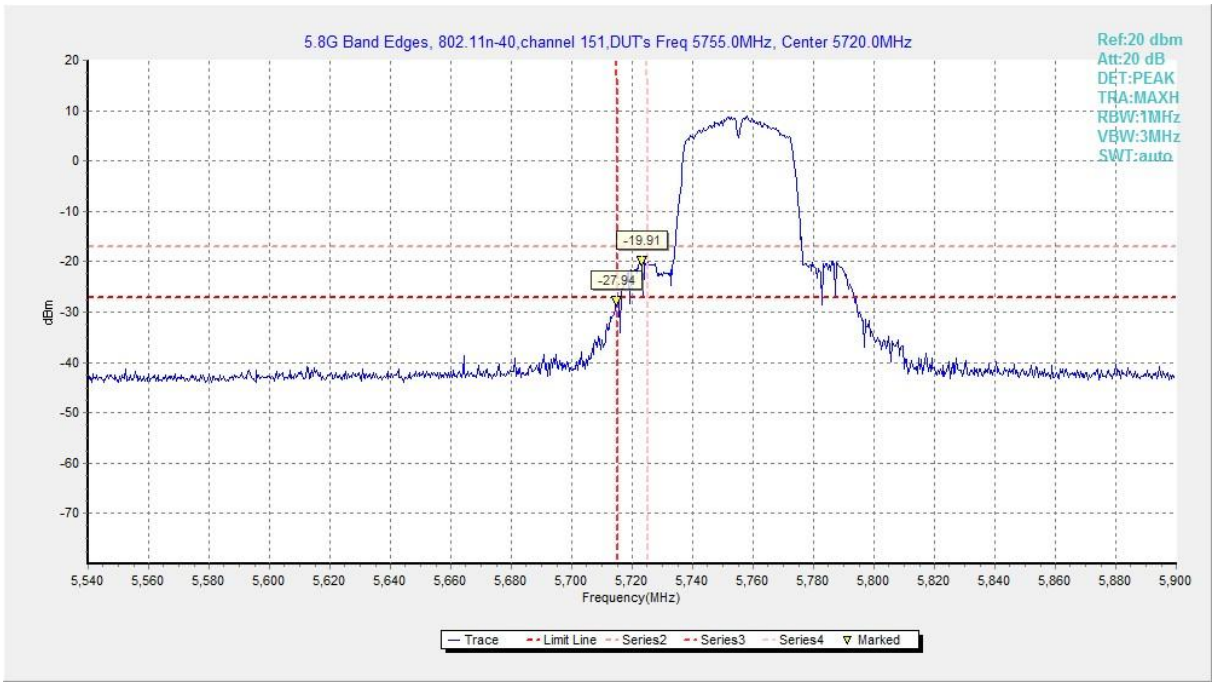


Fig. 77 Band Edges (802.11n-HT40, 5755MHz)

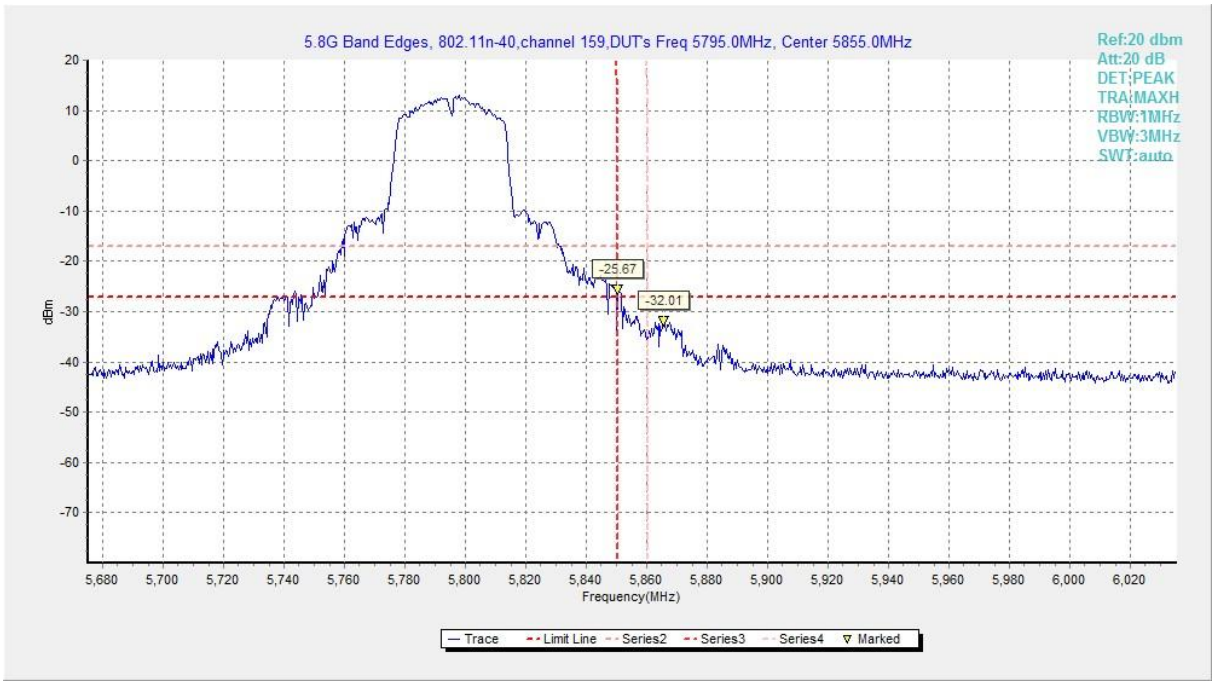


Fig. 78 Band Edges (802.11n-HT40, 5795MHz)

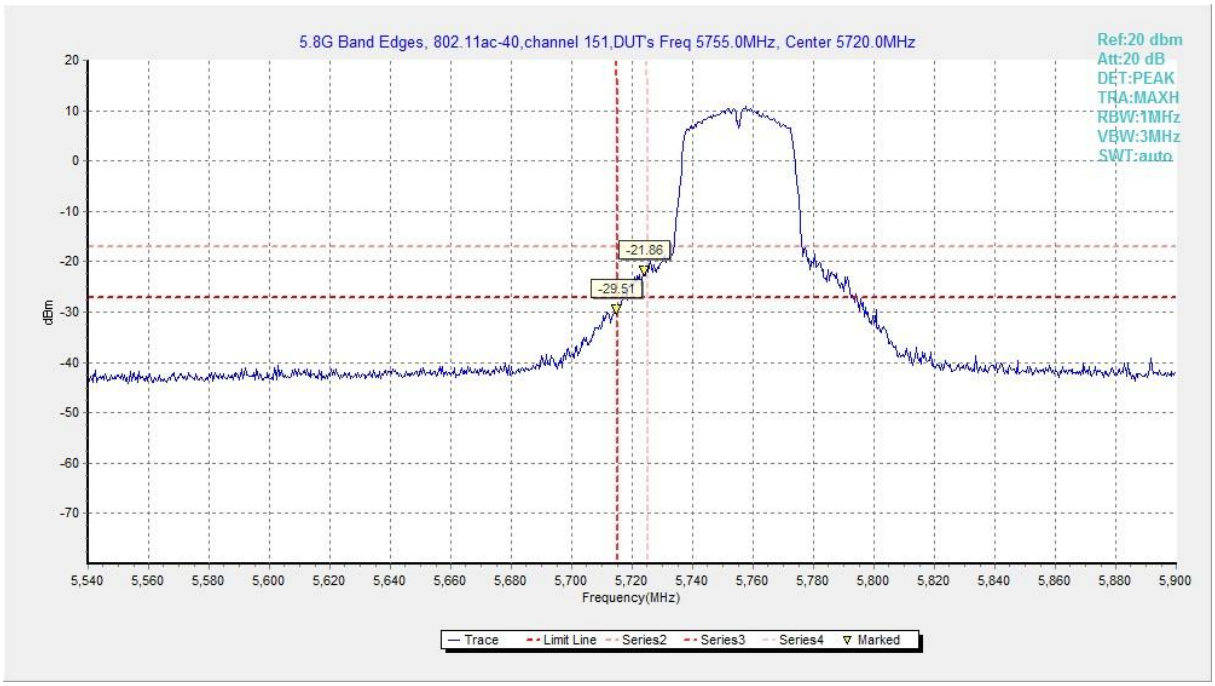


Fig. 79 Band Edges (802.11ac-HT40, 5755MHz)

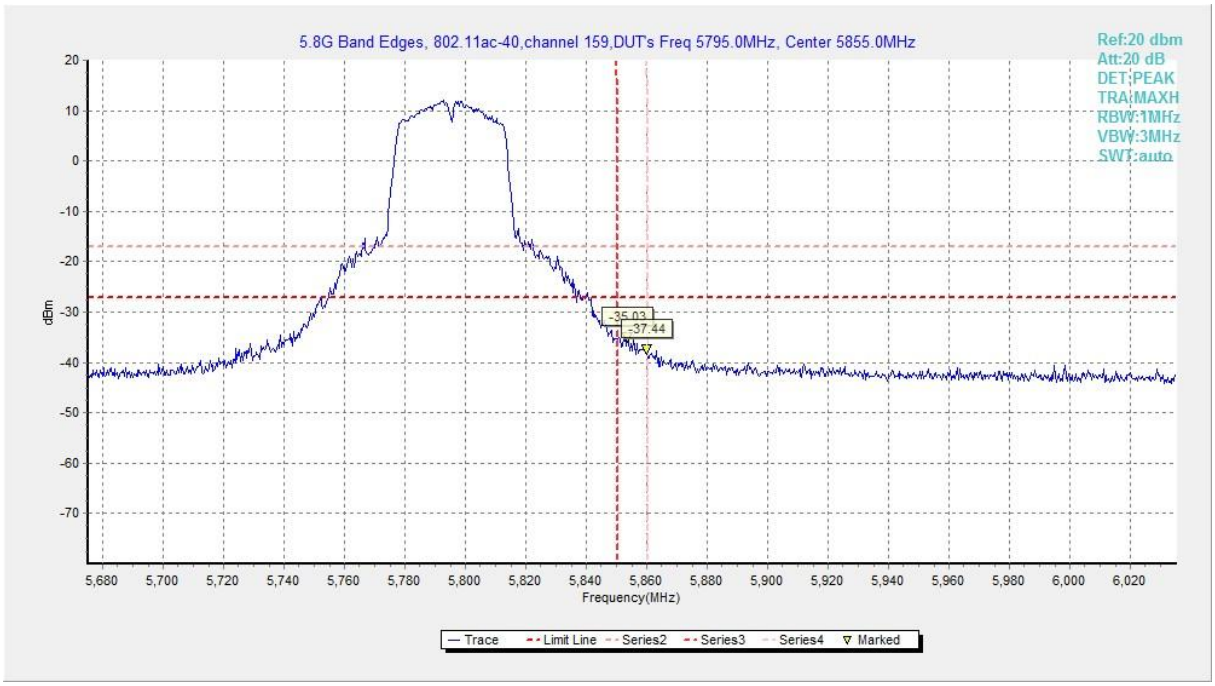


Fig. 80 Band Edges (802.11ac-HT40, 5795MHz)

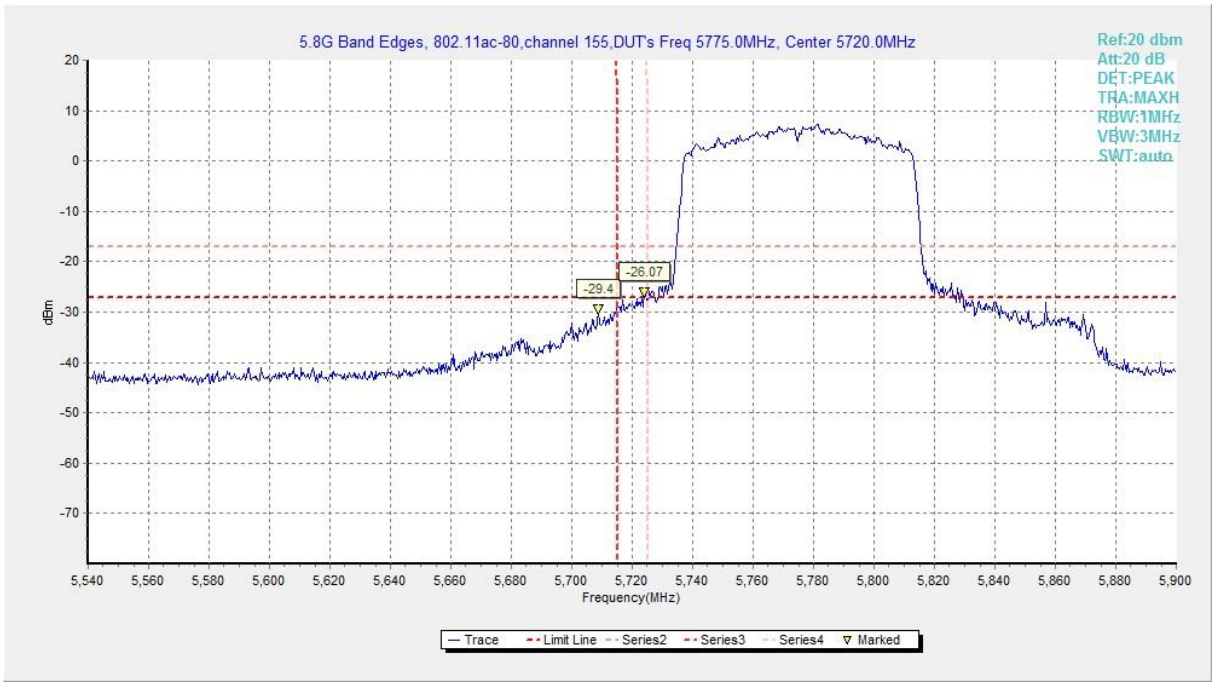


Fig. 81 Band Edges (802.11ac-HT80, 5775MHz)

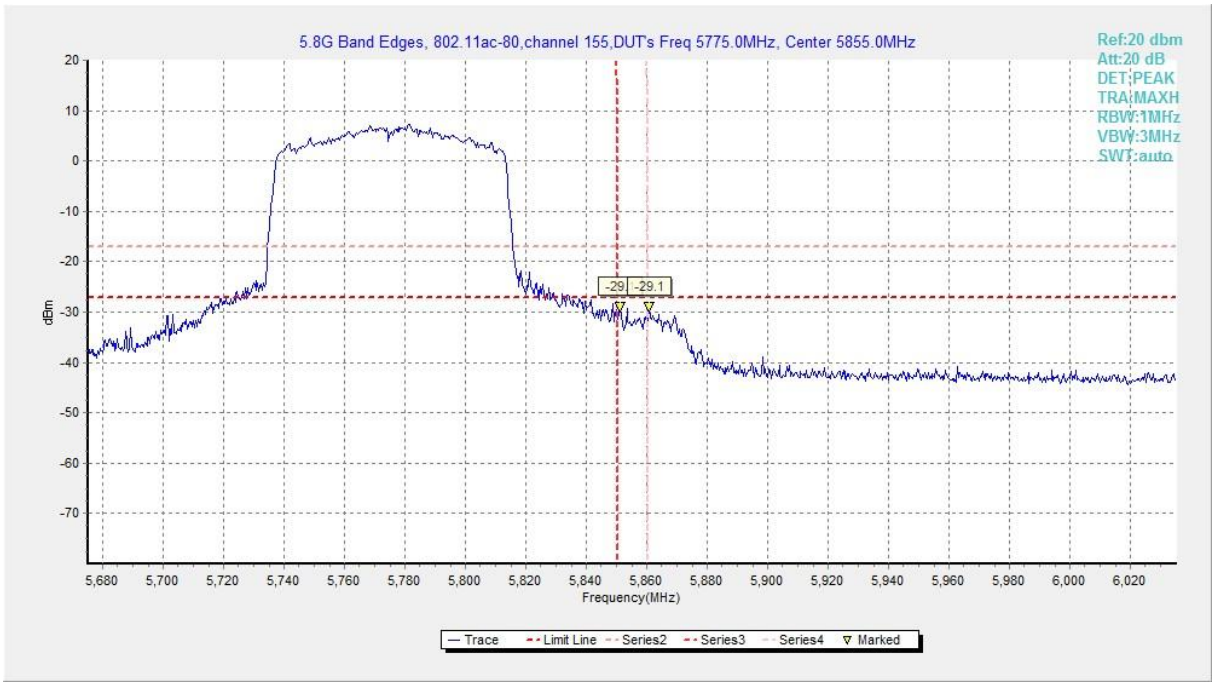


Fig. 82 Band Edges (802.11ac-HT80, 5855MHz)

A6.2 Band Edges - Radiated

Measurement Limit:

Standard	Frequency(MHz)	Limit (dBμV/m)
FCC 47 CFR Part 15.407	5650-5700	68.2-105.2
	5700-5720	105.2-110.8
	5720-5725	110.8-122.2
	5850-5855	122.2-110.8
	5855-5875	110.8-105.2
	5875-5925	105.2-68.2

The measurement is made according to KDB 789033 D02

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 Result:

Mode	Channel	Test Results	Conclusion
802.11a	5745 MHz	Fig.83	P
	5825 MHz	Fig.84	P
802.11n HT20	5745 MHz	Fig.85	P
	5825 MHz	Fig.86	P
802.11n HT40	5755 MHz	Fig.87	P
	5795 MHz	Fig.88	P

Conclusion: PASS

Test graphs as below:

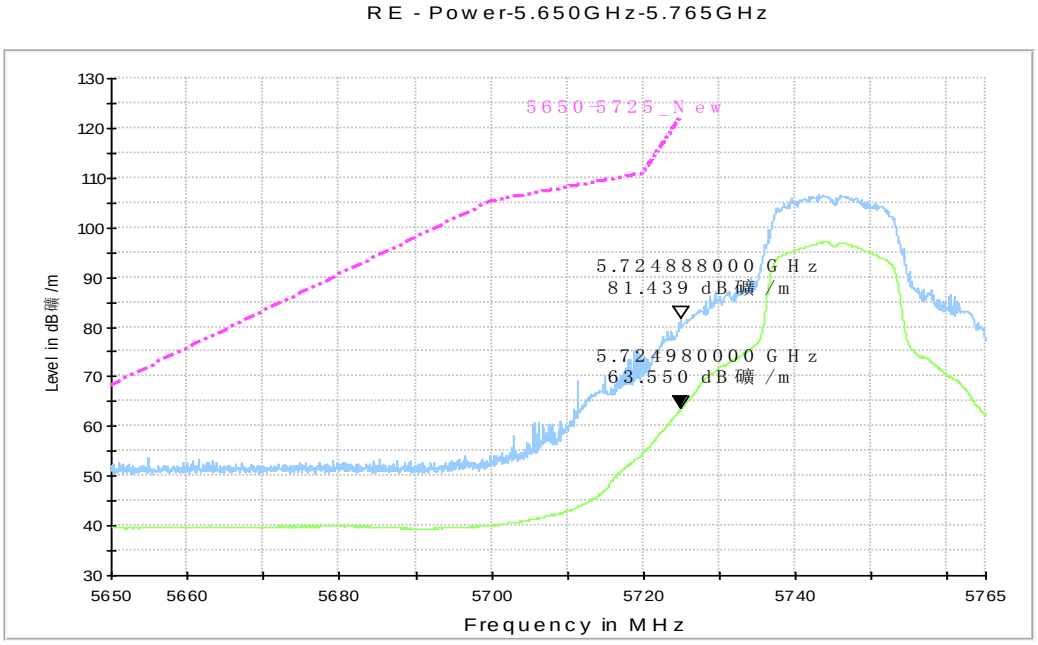


Fig. 83 Band Edges (802.11a, 5745MHz)

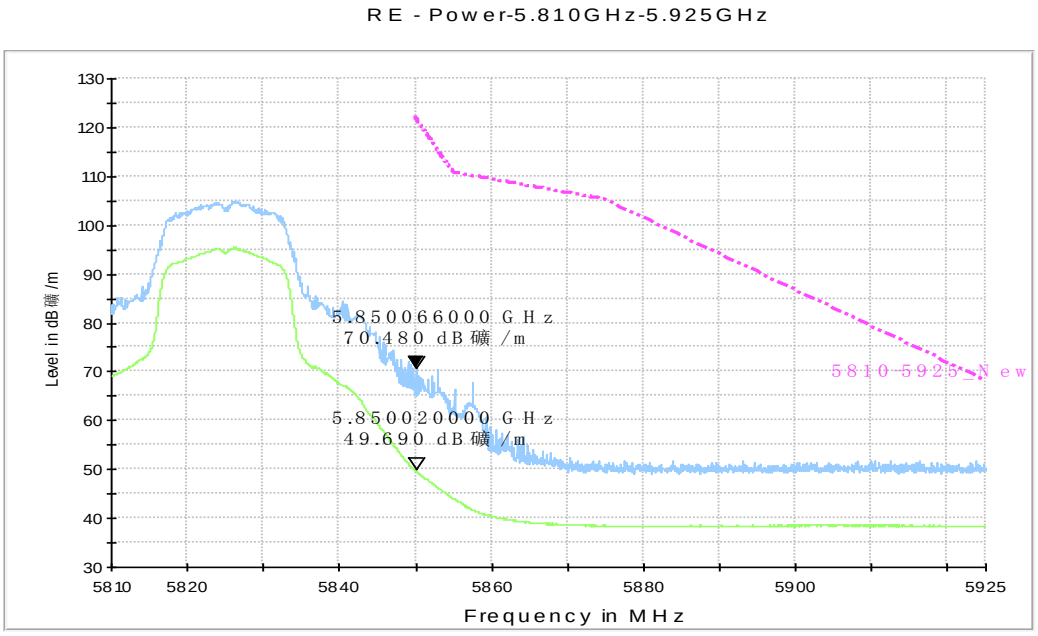


Fig. 84 Band Edges (802.11a, 5825MHz)

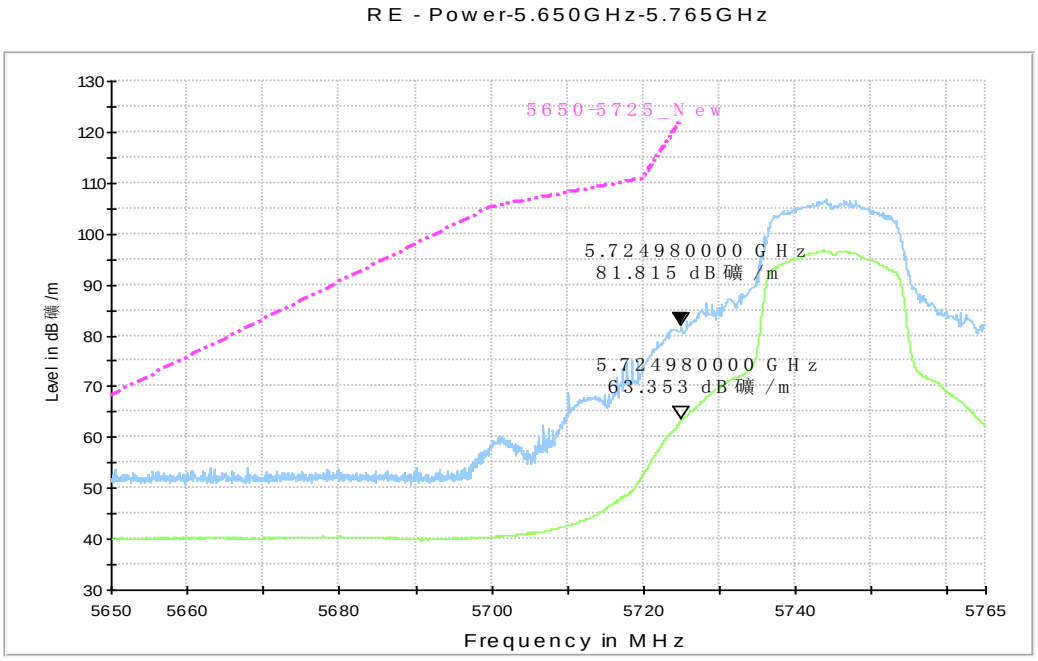


Fig. 85 Band Edges (802.11n-HT20, 5745MHz)

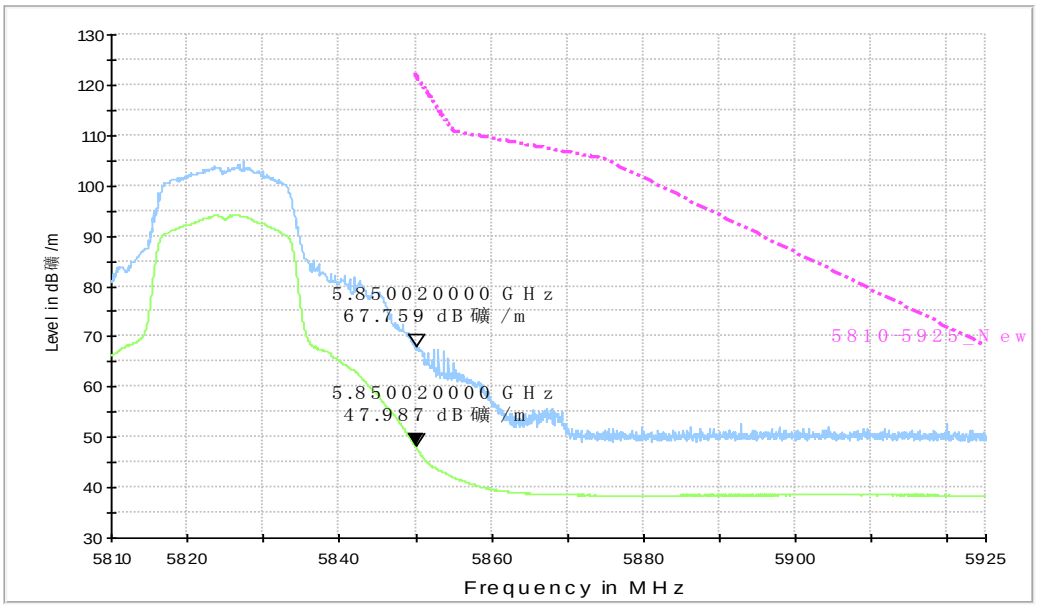


Fig. 86 Band Edges (802.11n-HT20, 5825MHz)

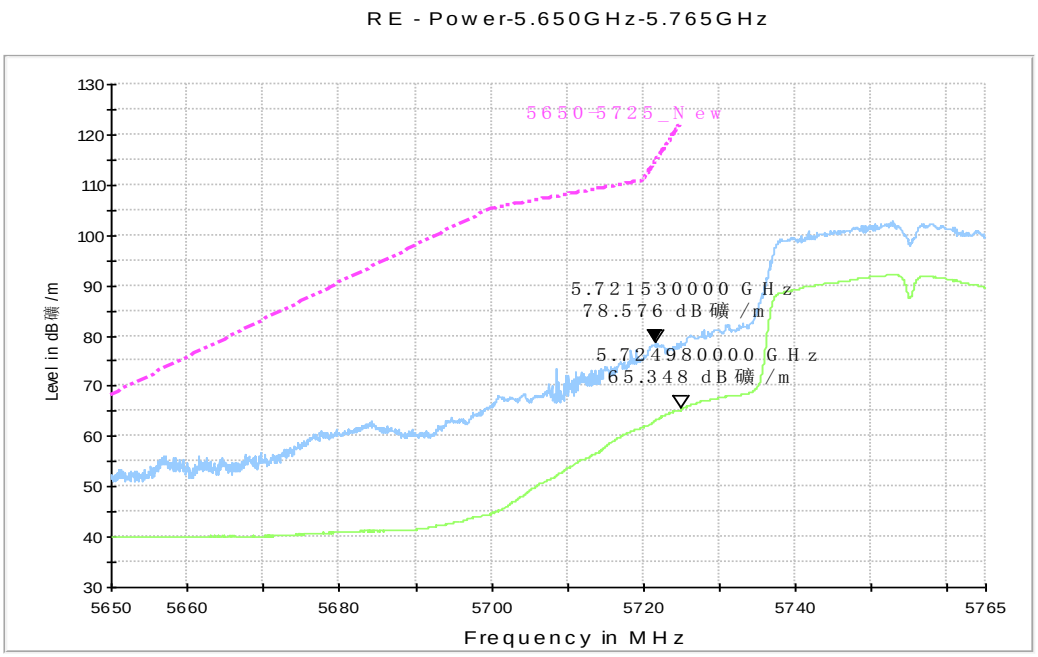


Fig. 87 Band Edges (802.11n-HT40, 5755MHz)

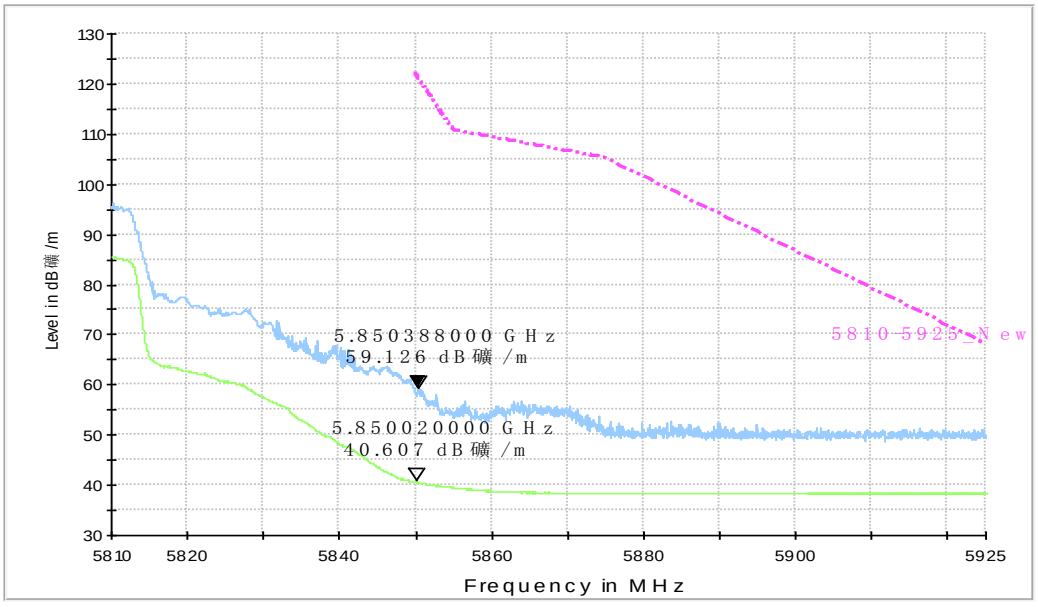


Fig. 88 Band Edges (802.11n-HT40, 5795MHz)

A.7. AC Powerline Conducted Emission

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 (MHz)	Quasi-peak Limit (dBμV)	Result (dBμV)		Conclusion
		With charger		
		802.11a	Idle	
0.15 to 0.5	66 to 56	Fig.89	Fig.89	P
0.5 to 5	56			
5 to 30	60			
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

WLAN (Average Limit)

Frequency range (MHz)	Average Limit (dBμV)	Result (dBμV)		Conclusion
		With charger		
		802.11a	Idle	
0.15 to 0.5	56 to 46	Fig.90	Fig.90	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.				

The measurement is made according to ANSI C63.10 .

Conclusion: PASS

Test graphs as below:

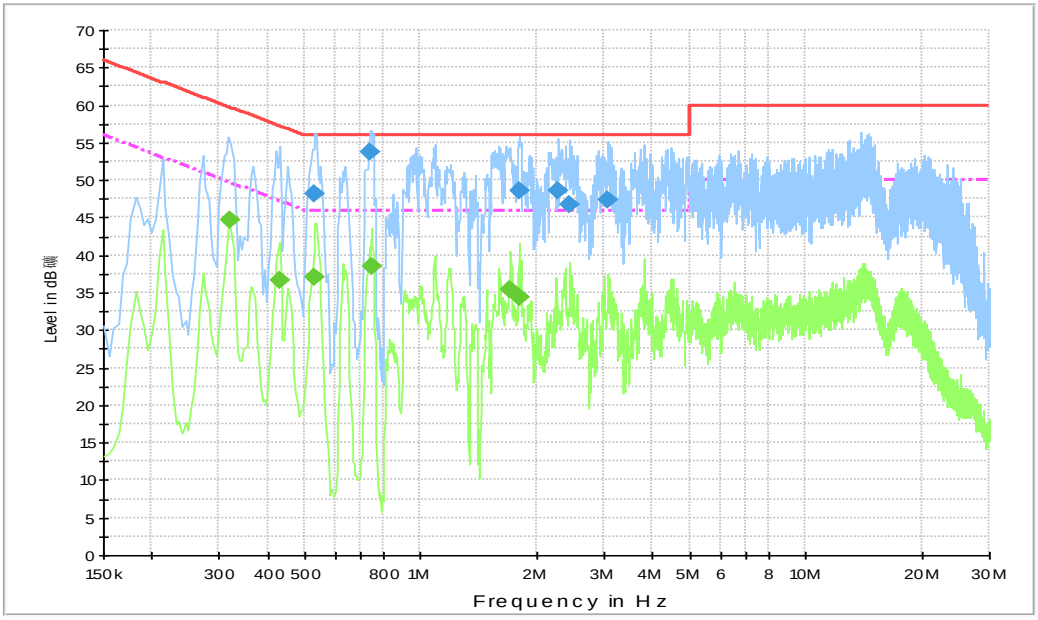


Fig. 89 AC Powerline Conducted Emission-802.11a

Final Result 1:

Frequency (MHz)	QuasiPeak (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.586500	51.6	GND	L1	10.7	4.4	56.0
0.672000	52.2	GND	L1	10.7	3.8	56.0
0.730500	52.9	GND	L1	10.7	3.1	56.0
0.739500	53.3	GND	L1	10.7	2.7	56.0
1.801500	46.3	GND	L1	10.7	9.7	56.0
4.128000	45.4	GND	L1	10.8	10.6	56.0

Final Result 2:

Frequency (MHz)	QuasiPeak (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.586500	34.6	GND	L1	10.7	11.4	46.0
0.672000	41.1	GND	L1	10.7	4.9	46.0
0.739500	39.8	GND	L1	10.7	6.2	46.0
1.095000	32.2	GND	L1	10.7	13.8	46.0
1.185000	33.1	GND	L1	10.7	12.9	46.0
13.560000	30.2	GND	L1	11.1	19.8	50.0

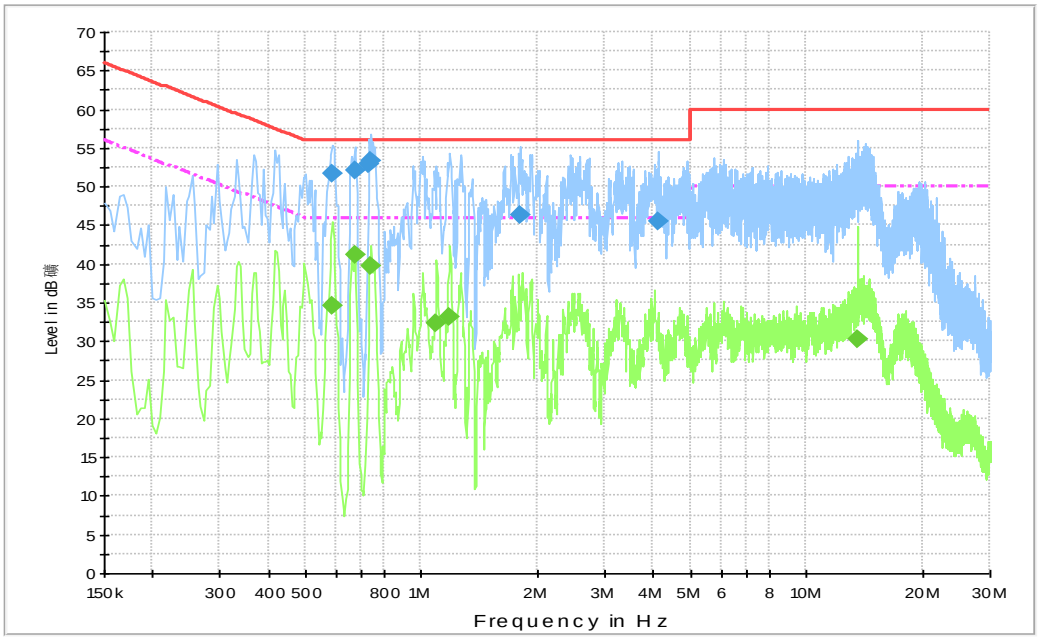


Fig. 90 AC Powerline Conducted Emission-Idle

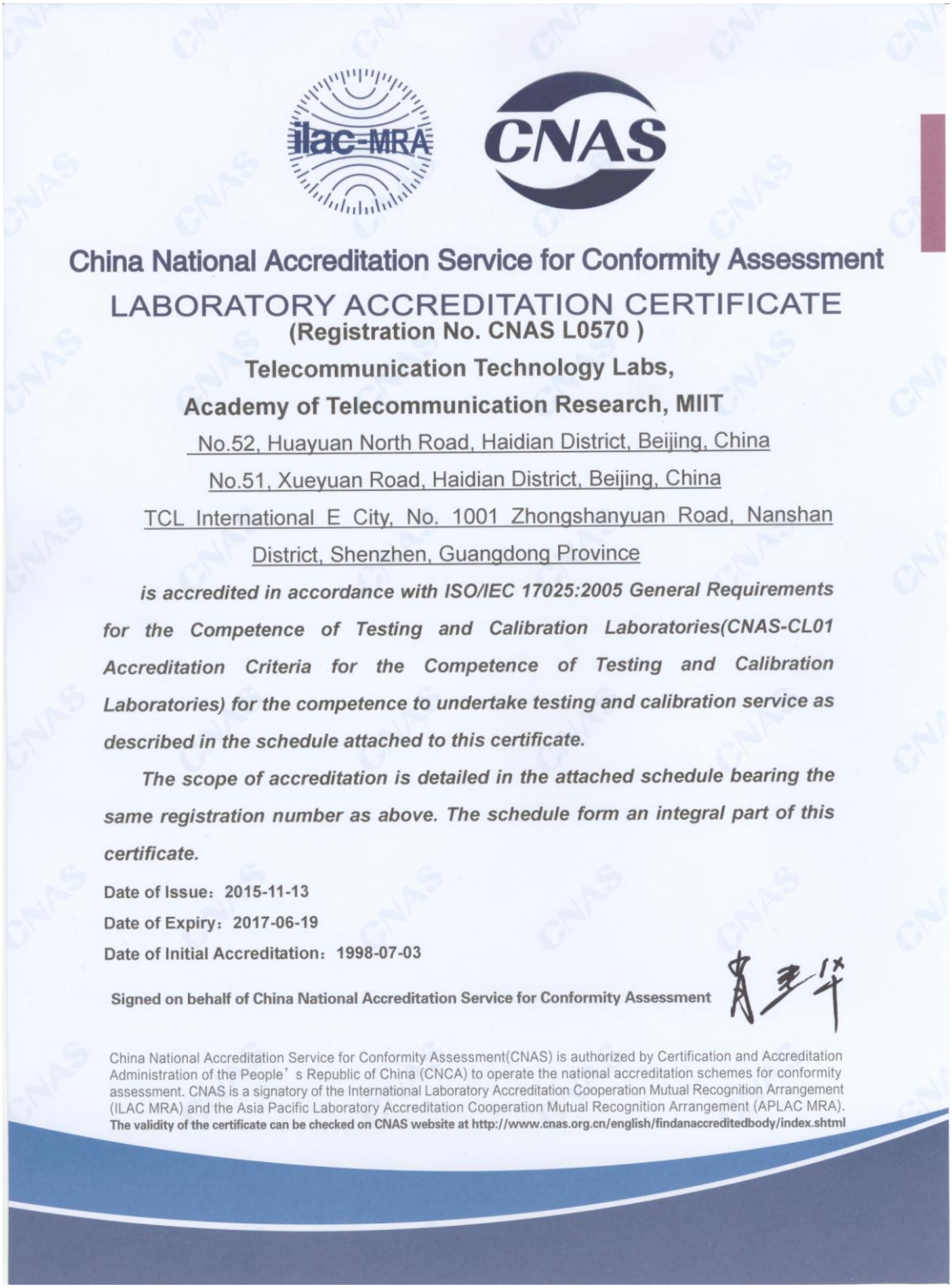
Final Result 1:

Frequency (MHz)	QuasiPeak (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.532500	48.3	GND	L1	10.7	7.7	56.0
0.739500	53.8	GND	L1	10.7	2.2	56.0
1.806000	48.5	GND	L1	10.7	7.5	56.0
2.283000	48.6	GND	L1	10.8	7.4	56.0
2.431500	46.8	GND	L1	10.8	9.2	56.0
3.075000	47.4	GND	L1	10.8	8.6	56.0

Final Result 2:

Frequency (MHz)	QuasiPeak (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.321000	44.6	GND	L1	10.7	5.1	49.7
0.429000	36.6	GND	L1	10.7	10.7	47.3
0.532500	37.1	GND	L1	10.7	8.9	46.0
0.744000	38.5	GND	L1	10.7	7.5	46.0
1.711500	35.5	GND	L1	10.7	10.5	46.0
1.806000	34.4	GND	L1	10.7	11.6	46.0

ANNEX B: Accreditation Certificate



China National Accreditation Service for Conformity Assessment

LABORATORY ACCREDITATION CERTIFICATE

(Registration No. CNAS L0570)

Telecommunication Technology Labs,

Academy of Telecommunication Research, MIIT

No.52, Huayuan North Road, Haidian District, Beijing, China

No.51, Xueyuan Road, Haidian District, Beijing, China

TCL International E City, No. 1001 Zhongshanyuan Road, Nanshan District, Shenzhen, Guangdong Province

is accredited in accordance with ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories(CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence to undertake testing and calibration service as described in the schedule attached to this certificate.

The scope of accreditation is detailed in the attached schedule bearing the same registration number as above. The schedule form an integral part of this certificate.

Date of Issue：2015-11-13

Date of Expiry：2017-06-19

Date of Initial Accreditation：1998-07-03

Signed on behalf of China National Accreditation Service for Conformity Assessment

China National Accreditation Service for Conformity Assessment(CNAS) is authorized by Certification and Accreditation Administration of the People's Republic of China (CNCA) to operate the national accreditation schemes for conformity assessment. CNAS is a signatory of the International Laboratory Accreditation Cooperation Mutual Recognition Arrangement (ILAC MRA) and the Asia Pacific Laboratory Accreditation Cooperation Mutual Recognition Arrangement (APLAC MRA).

The validity of the certificate can be checked on CNAS website at http://www.cnas.org.cn/english/findanaccreditedbody/index.shtml

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