

RE-Power_5.125G-5.175GHz

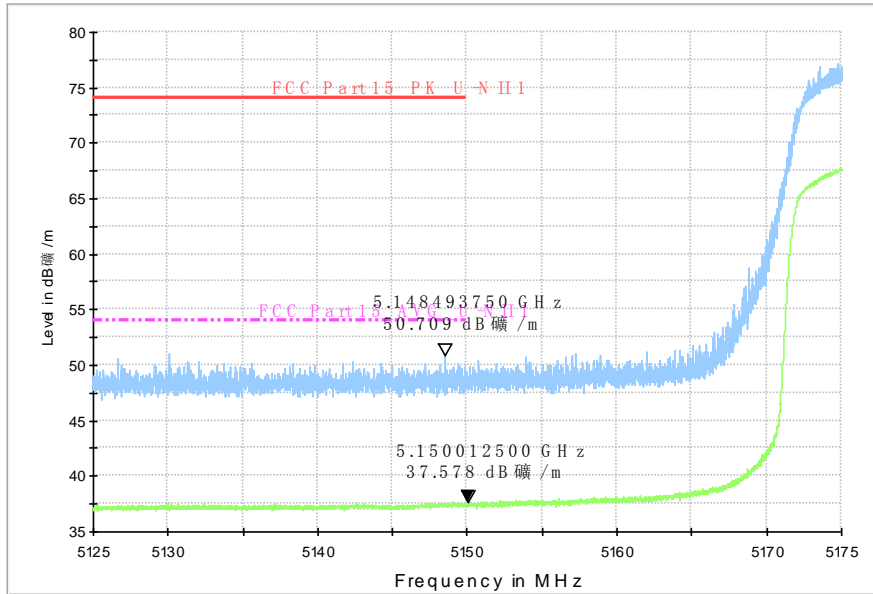


Fig. 47 Band Edges (802.11n-HT40, 5190MHz)

RE-Power_5.325G-5.375GHz

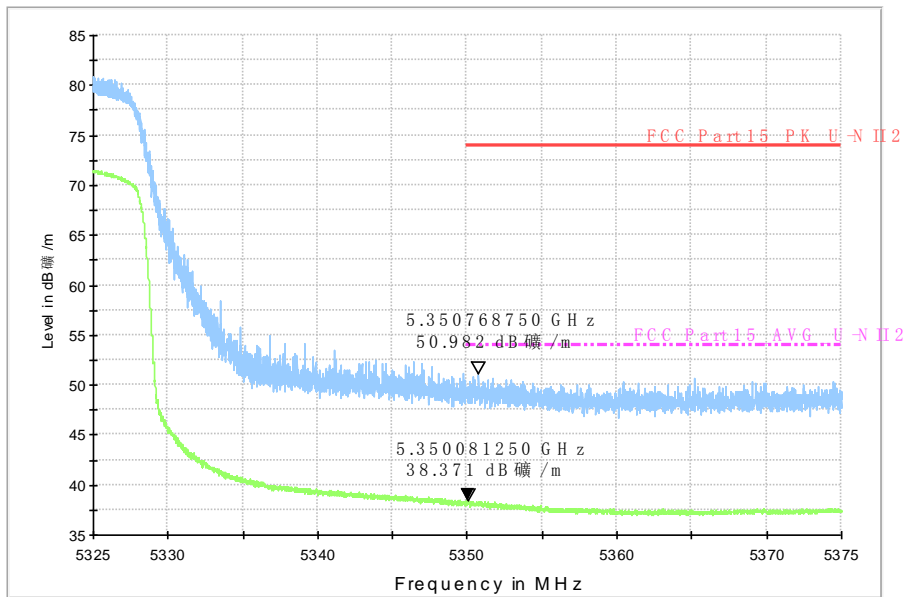


Fig. 48 Band Edges (802.11n-HT40, 5310MHz)

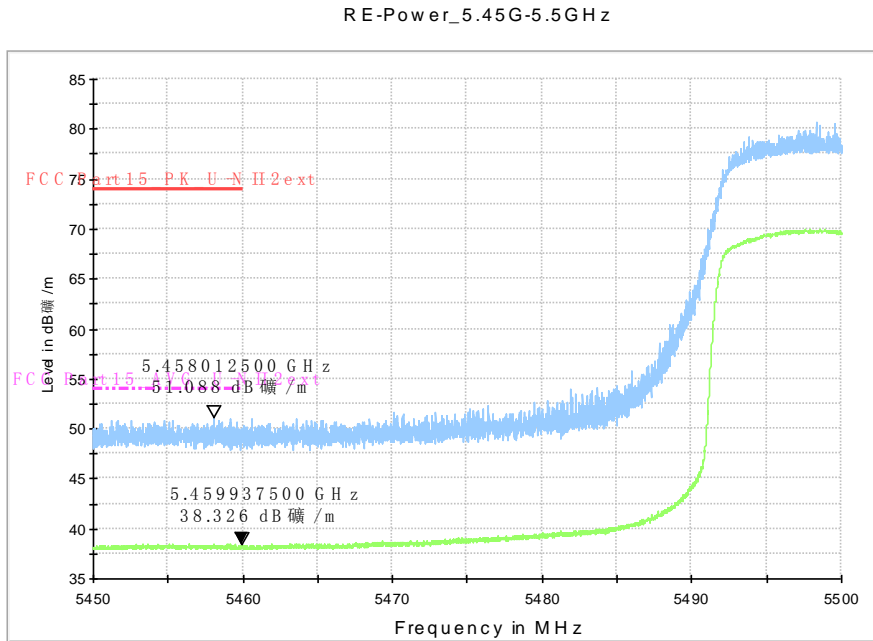


Fig. 49 Band Edges (802.11n-HT40, 5510MHz)

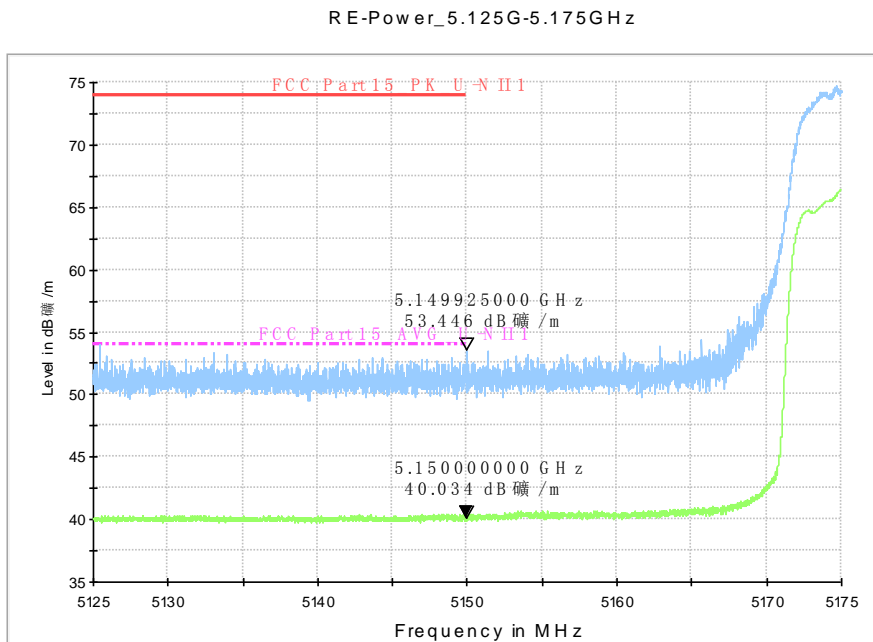


Fig. 50 Band Edges (802.11ac-HT80, 5210MHz)

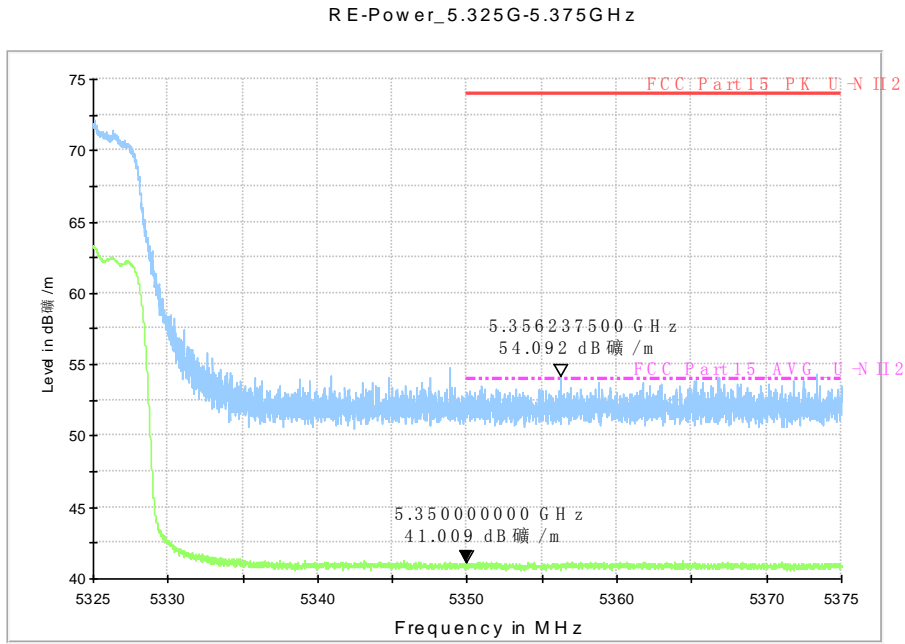


Fig. 51 Band Edges (802.11ac-HT80, 5290MHz)

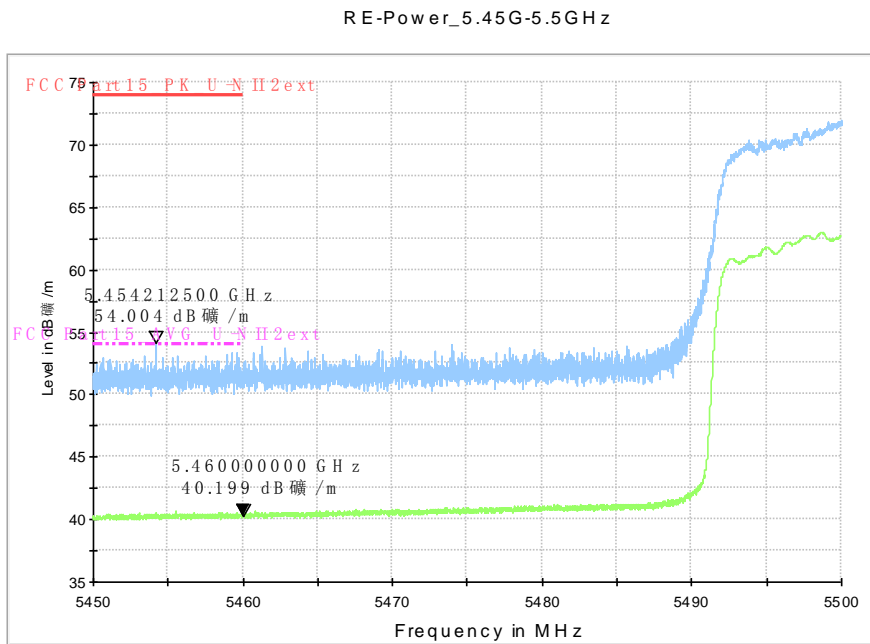


Fig. 52 Band Edges (802.11ac-HT80, 5530MHz)

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(dB μ V/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 =3.9 dB, k=2.

Measurement Results:

802.11a mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11a	36(5180MHz)	1 GHz ~ 6 GHz	Fig.53	P
		6 GHz ~ 18 GHz	Fig.54	P
	40(5200MHz)	30 MHz ~1 GHz	Fig.55	P
		1 GHz ~ 6 GHz	Fig.56	P
		6 GHz ~ 18 GHz	Fig.57	P
		18 GHz ~ 26.5 GHz	Fig.58	P
		26.5 GHz ~ 40 GHz	Fig.59	P
	48(5240MHz)	1 GHz ~ 6 GHz	Fig.60	P
		6 GHz ~ 18 GHz	Fig.61	P
	52(5260MHz)	1 GHz ~ 6 GHz	Fig.62	P
		6 GHz ~ 18 GHz	Fig.63	P
	56(5280MHz)	30 MHz ~1 GHz	Fig.64	P
		1 GHz ~ 6 GHz	Fig.65	P
		6 GHz ~ 18 GHz	Fig.66	P
		18 GHz ~ 26.5 GHz	Fig.67	P
		26.5 GHz ~ 40 GHz	Fig.68	P
	64(5320MHz)	1 GHz ~ 6 GHz	Fig.69	P
		6 GHz ~ 18 GHz	Fig.70	P
	100(5500MHz)	1 GHz ~ 6 GHz	Fig.71	P
		6 GHz ~ 18 GHz	Fig.72	P
	120(5600MHz)	30 MHz ~1 GHz	Fig.73	P
		1 GHz ~ 6 GHz	Fig.74	P
		6 GHz ~ 18 GHz	Fig.75	P
		18 GHz ~ 26.5 GHz	Fig.76	P
		26.5 GHz ~ 40 GHz	Fig.77	P
	140(5700MHz)	1 GHz ~ 6 GHz	Fig.78	P
		6 GHz ~ 18 GHz	Fig.79	P

802.11n-HT20 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n -HT20	36(5180MHz)	1 GHz ~ 6 GHz	Fig.80	P
		6 GHz ~ 18 GHz	Fig.81	P
	40(5200MHz)	30 MHz ~1 GHz	Fig.82	P
		1 GHz ~ 6 GHz	Fig.83	P
		6 GHz ~ 18 GHz	Fig.84	P
		18 GHz ~ 26.5 GHz	Fig.85	P
		26.5 GHz ~ 40 GHz	Fig.86	P
	48(5240MHz)	1 GHz ~ 6 GHz	Fig.87	P
		6 GHz ~ 18 GHz	Fig.88	P
	52(5260MHz)	1 GHz ~ 6 GHz	Fig.89	P
		6 GHz ~ 18 GHz	Fig.90	P
	56(5280MHz)	30 MHz ~1 GHz	Fig.91	P
		1 GHz ~ 6 GHz	Fig.92	P
		6 GHz ~ 18 GHz	Fig.93	P
		18 GHz ~ 26.5 GHz	Fig.94	P
		26.5 GHz ~ 40 GHz	Fig.95	P
	64(5320MHz)	1 GHz ~ 6 GHz	Fig.96	P
		6 GHz ~ 18 GHz	Fig.97	P
	100(5500MHz)	1 GHz ~ 6 GHz	Fig.98	P
		6 GHz ~ 18 GHz	Fig.99	P
	120(5600MHz)	30 MHz ~1 GHz	Fig.100	P
		1 GHz ~ 6 GHz	Fig.101	P
		6 GHz ~ 18 GHz	Fig.102	P
		18 GHz ~ 26.5 GHz	Fig.103	P
		26.5 GHz ~ 40 GHz	Fig.104	P
	140(5700MHz)	1 GHz ~ 6 GHz	Fig.105	P
		6 GHz ~ 18 GHz	Fig.106	P

802.11n-HT40 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n HT40	38(5190MHz)	30 MHz ~1 GHz	Fig.107	P
		1 GHz ~ 6 GHz	Fig.108	P
		6 GHz ~ 18 GHz	Fig.109	P
		18 GHz ~ 26.5 GHz	Fig.110	P
		26.5 GHz ~ 40 GHz	Fig.111	P
	46(5230MHz)	30 MHz ~1 GHz	Fig.112	P
		1 GHz ~ 6 GHz	Fig.113	P
		6 GHz ~ 18 GHz	Fig.114	P
	54(5270MHz)	30 MHz ~1 GHz	Fig.115	P
		1 GHz ~ 6 GHz	Fig.116	P
		6 GHz ~ 18 GHz	Fig.117	P
		18 GHz ~ 26.5 GHz	Fig.118	P
		26.5 GHz ~ 40 GHz	Fig.119	P
	62(5310MHz)	30 MHz ~1 GHz	Fig.120	P
		1 GHz ~ 6 GHz	Fig.121	P
		6 GHz ~ 18 GHz	Fig.122	P
	102(5510MHz)	1 GHz ~ 6 GHz	Fig.123	P
		6 GHz ~ 18 GHz	Fig.124	P
	118(5590MHz)	30 MHz ~1 GHz	Fig.125	P
		1 GHz ~ 6 GHz	Fig.126	P
6 GHz ~ 18 GHz		Fig.127	P	
18 GHz ~ 26.5 GHz		Fig.128	P	
134(5670MHz)	26.5 GHz ~ 40 GHz	Fig.129	P	
	1 GHz ~ 6 GHz	Fig.130	P	
		6 GHz ~ 18 GHz	Fig.131	P

802.11ac-HT80 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11ac HT80	42(5210MHz)	1 GHz ~ 6 GHz	Fig.132	P
		6 GHz ~ 18 GHz	Fig.133	P
	58(5290MHz)	30 MHz ~1 GHz	Fig.134	P
		1 GHz ~ 6 GHz	Fig.135	P
		6 GHz ~ 18 GHz	Fig.136	P
		18 GHz ~ 26.5 GHz	Fig.137	P
	106(5530MHz)	26.5 GHz ~ 40 GHz	Fig.138	P
		1 GHz ~ 6 GHz	Fig.139	P
		6 GHz ~ 18 GHz	Fig.140	P

Conclusion: PASS

Note:

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

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

The measurement results are obtained as described below:

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

802.11a

The worse case is measured in channel 52

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
17553.000	40.8	-19.2	45.6	14.4	V
17550.000	40.7	-19.2	45.6	14.3	V
17556.000	40.7	-19.2	45.6	14.3	H
17578.500	40.7	-18.9	45.6	14.0	V
17557.500	40.6	-19.2	45.6	14.2	H
17532.000	40.6	-19.2	45.6	14.2	V

802.11n-HT20

The worse case is measured in channel 52

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
17553.000	41.2	-19.2	45.6	14.8	V
17550.000	40.8	-19.2	45.6	14.4	V
17532.000	40.7	-19.2	45.6	14.3	H
17556.000	40.6	-19.2	45.6	14.2	V
17557.500	40.6	-19.2	45.6	14.2	V
17560.500	40.6	-19.2	45.6	14.2	H

802.11n-HT40

The worse case is measured in channel 54

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P_{Mea} (dBuV/m)	Polarization
17553.000	40.7	-19.2	45.6	14.3	H
17550.000	40.7	-19.2	45.6	14.3	V
17532.000	40.6	-19.2	45.6	14.2	V
17556.000	40.5	-19.2	45.6	14.1	V
17578.500	40.3	-18.9	45.6	13.6	H
17554.500	40.3	-19.2	45.6	13.9	V

802.11ac-HT80

The worse case is measured in channel 58

Frequency(MHz)	Result (dBuV/m)	Cable Loss	Antenna Factor	P _{Mea} (dBuV/m)	Polarization
5350.000	41.0	-34.8	34.6	41.200	V
17550.000	40.6	-19.2	45.6	14.200	V
17982.000	40.6	-17.7	45.6	12.700	H
17557.500	40.5	-19.2	45.6	14.100	H
17532.000	40.4	-19.2	45.6	14.000	V
17556.000	40.4	-19.2	45.6	14.000	V

Test graphs as below:

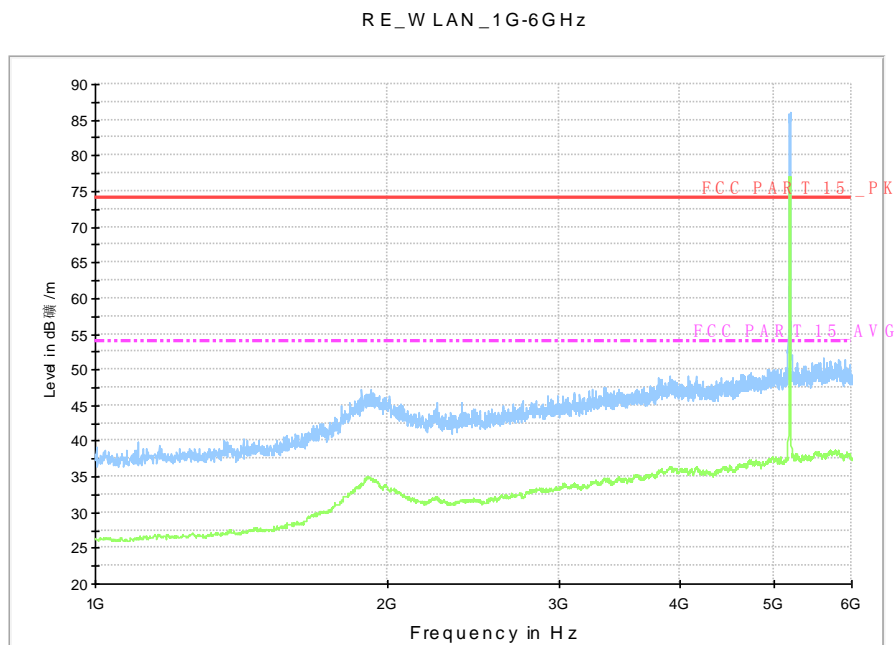


Fig. 53 Radiated Spurious Emission (802.11a, ch36, 1 GHz-6 GHz)

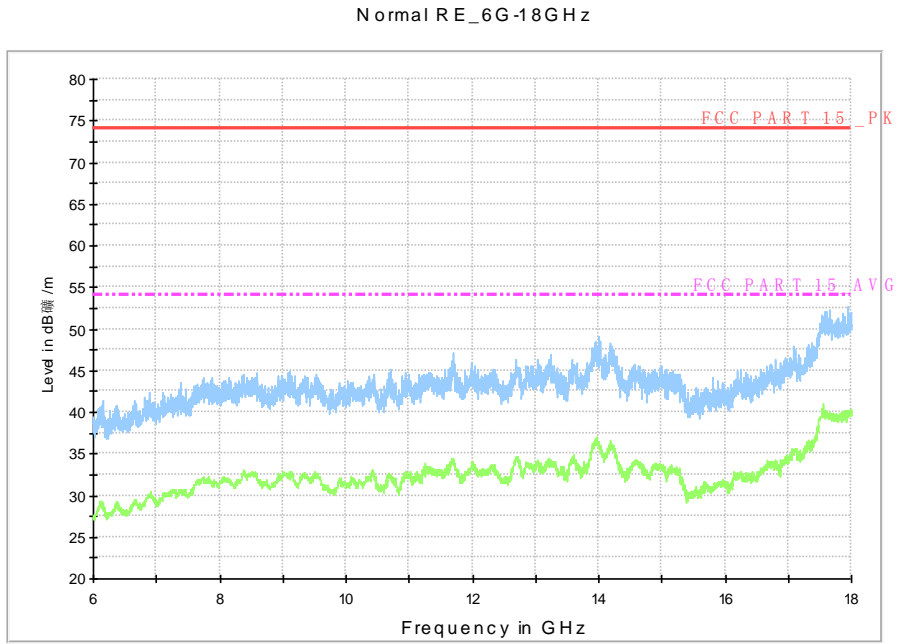


Fig. 54 Radiated Spurious Emission (802.11a, ch36, 6 GHz-18 GHz)

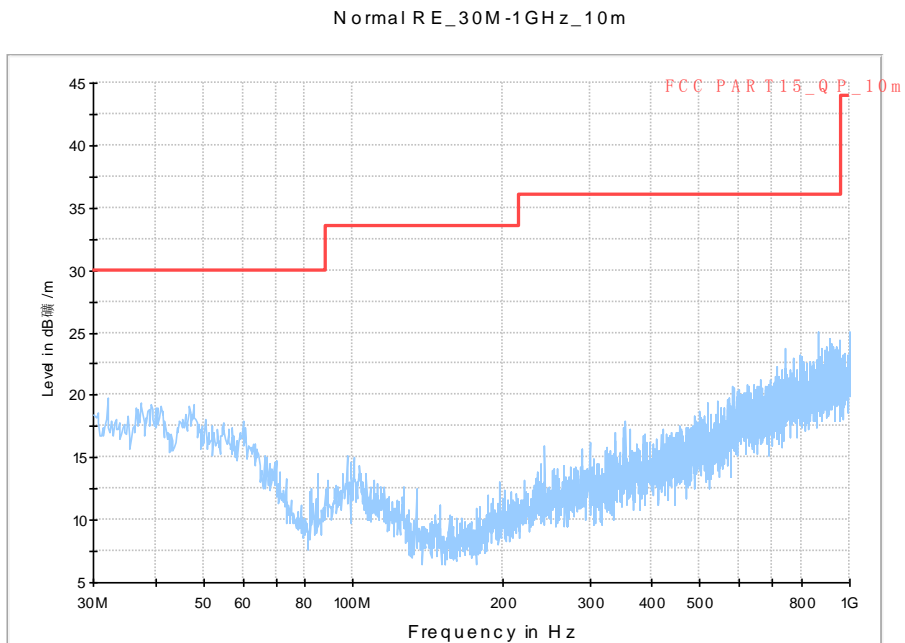


Fig. 55 Radiated Spurious Emission (802.11a, ch40, 30 MHz-1 GHz)

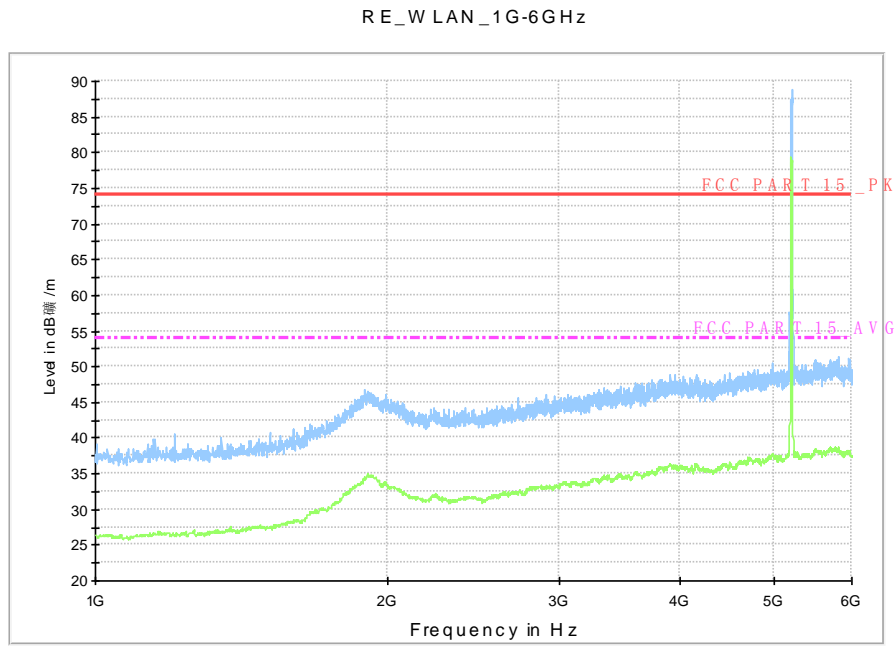


Fig. 56 Radiated Spurious Emission (802.11a, ch40, 1 GHz-6 GHz)

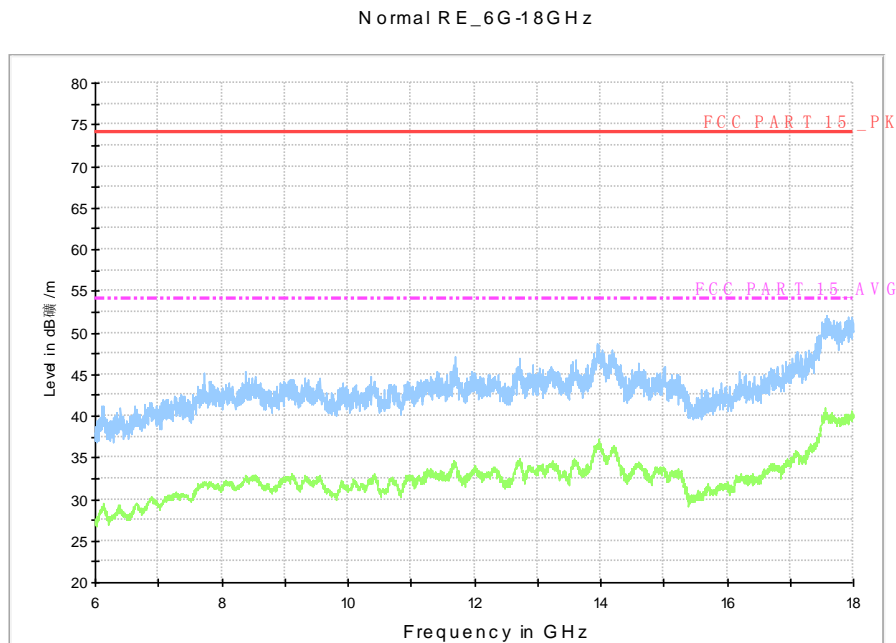


Fig. 57 Radiated Spurious Emission (802.11a, ch40, 6 GHz-18 GHz)

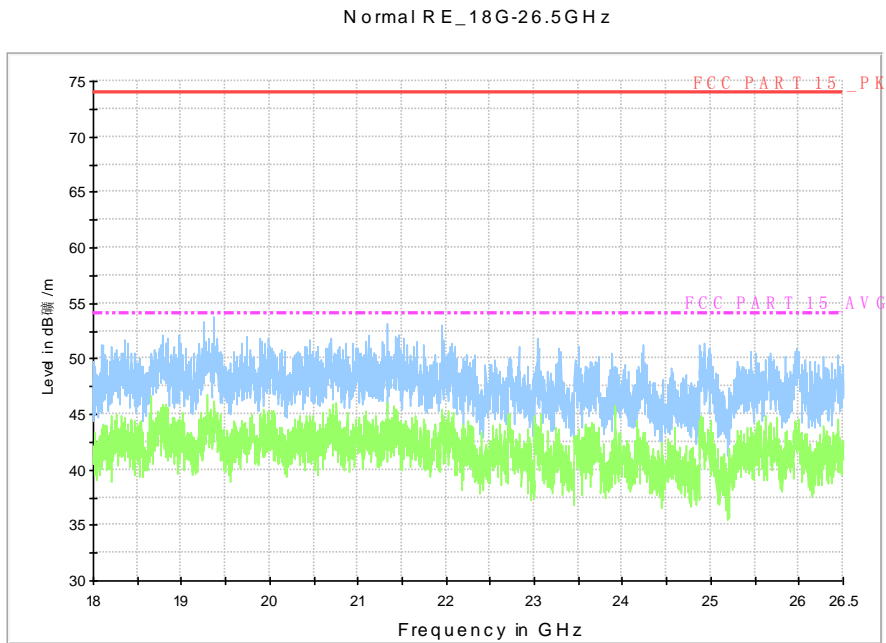


Fig. 58 Radiated Spurious Emission (802.11a, ch40, 18 GHz-26.5 GHz)

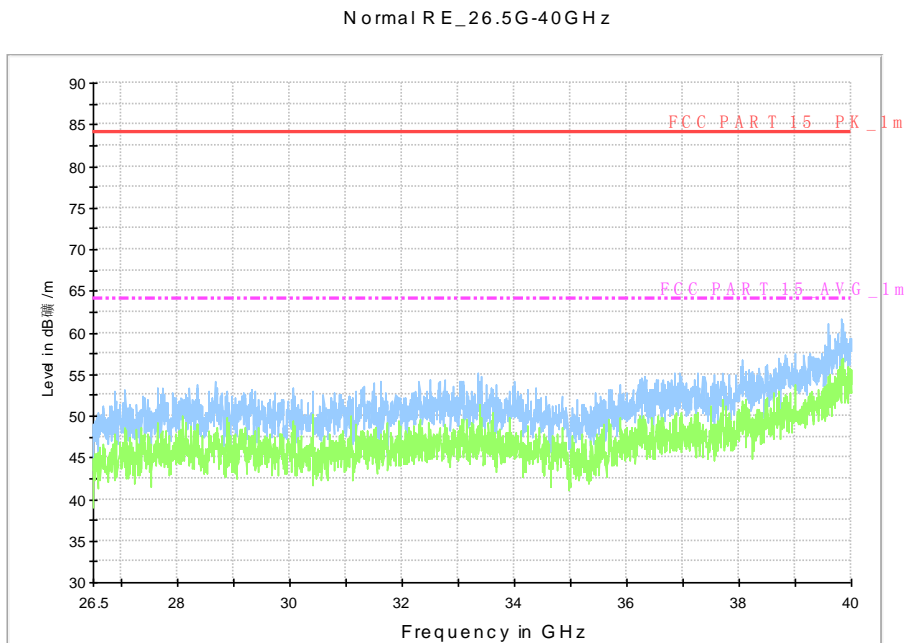


Fig. 59 Radiated Spurious Emission (802.11a, ch40, 26.5 GHz-40 GHz)

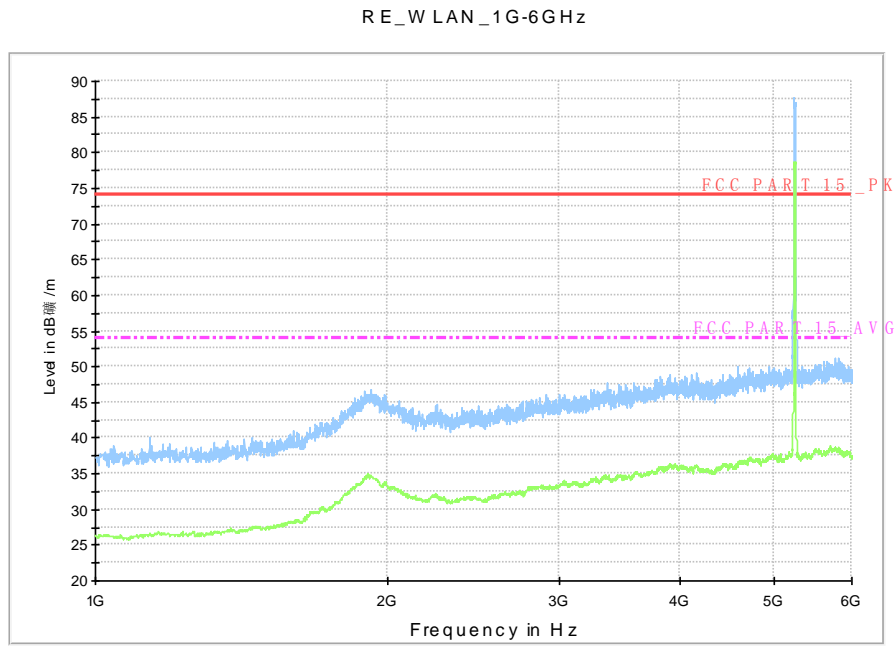


Fig. 60 Radiated Spurious Emission (802.11a, ch48, 1 GHz-6 GHz)

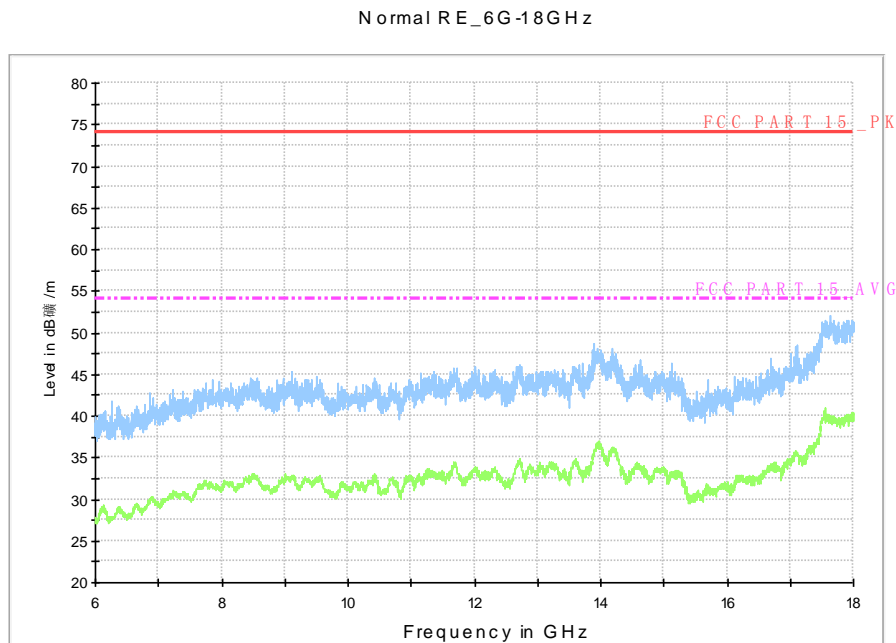


Fig. 61 Radiated Spurious Emission (802.11a, ch48, 6 GHz-18 GHz)

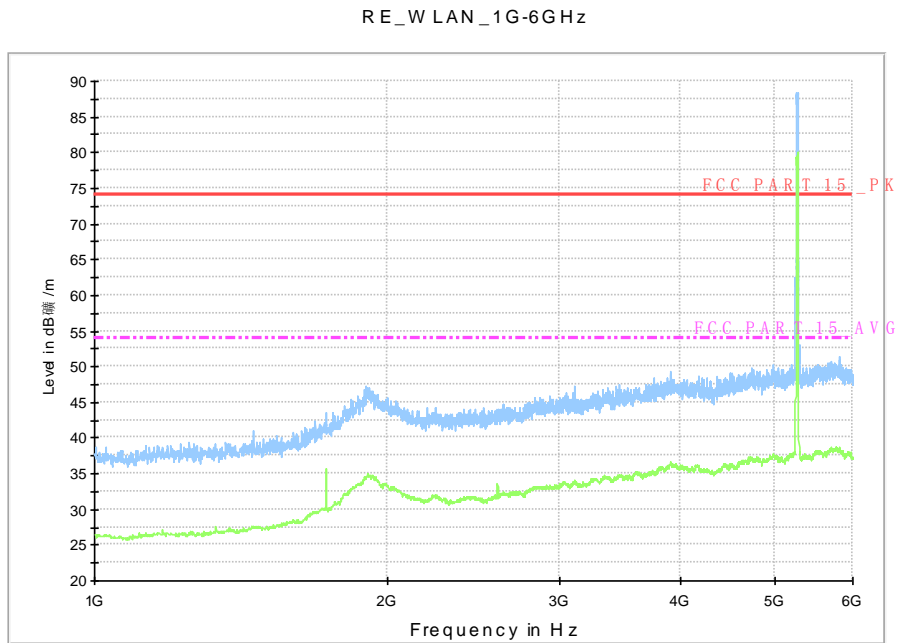


Fig. 62 Radiated Spurious Emission (802.11a, ch52, 1 GHz-6 GHz)

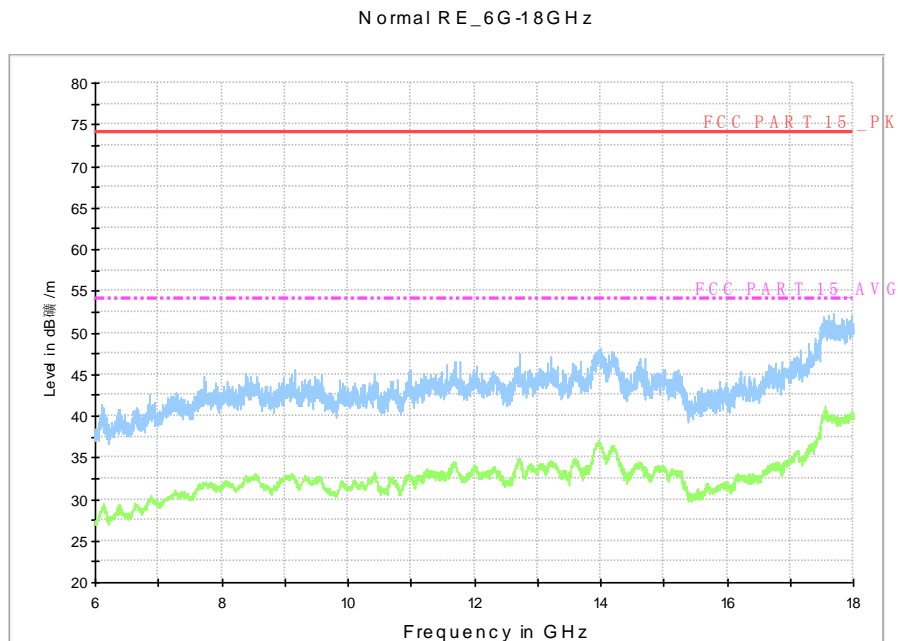


Fig. 63 Radiated Spurious Emission (802.11a, ch52, 6 GHz-18 GHz)

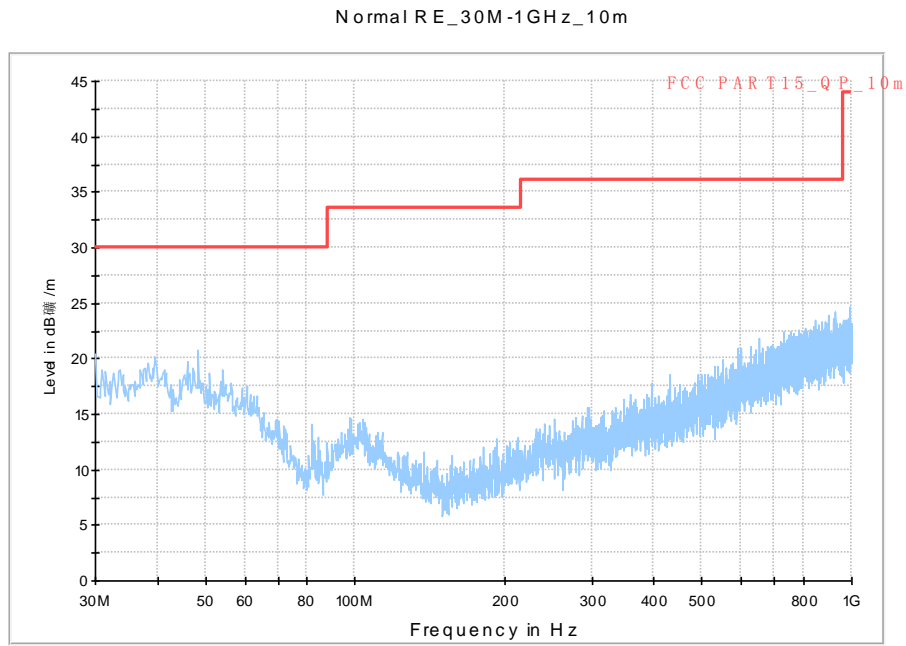


Fig. 64 Radiated Spurious Emission (802.11a, ch56, 30 MHz-1 GHz)

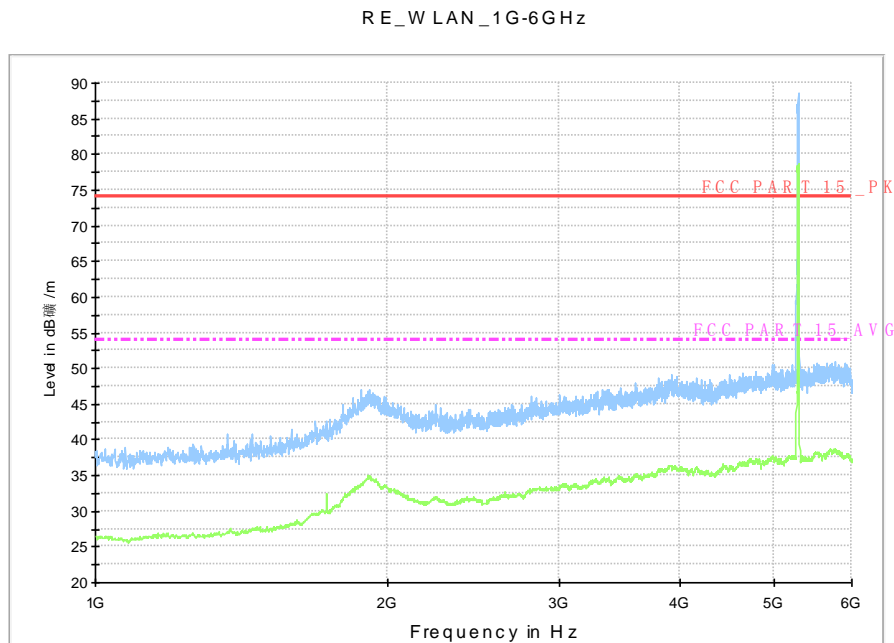


Fig. 65 Radiated Spurious Emission (802.11a, ch56, 1 GHz-6 GHz)

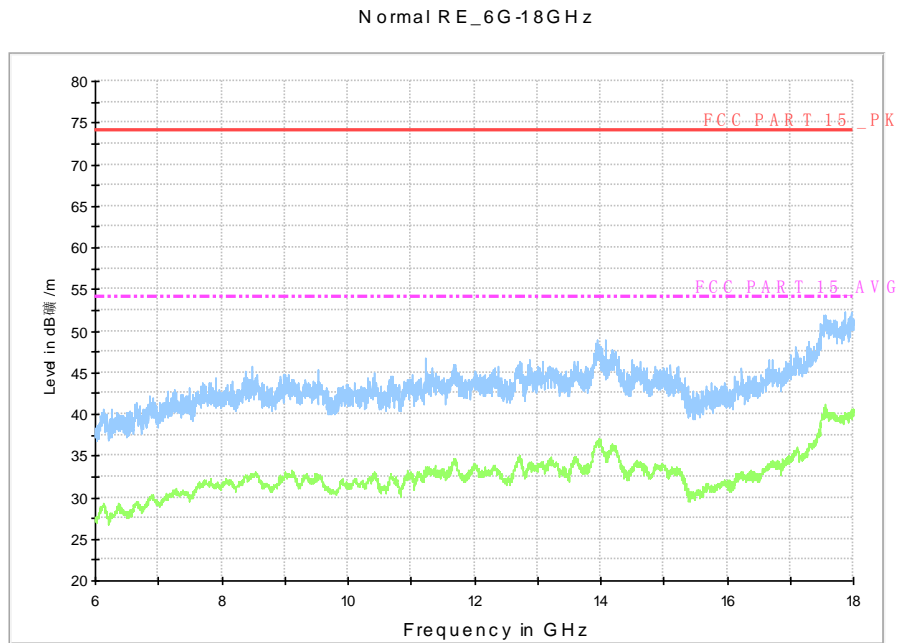


Fig. 66 Radiated Spurious Emission (802.11a, ch56, 6 GHz-18 GHz)

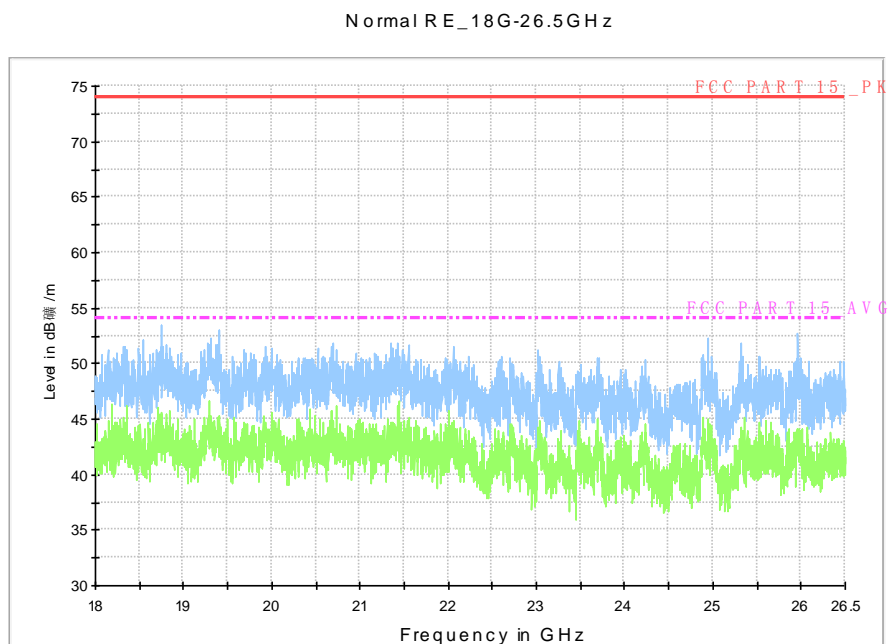


Fig. 67 Radiated Spurious Emission (802.11a, ch56, 18 GHz-26.5 GHz)

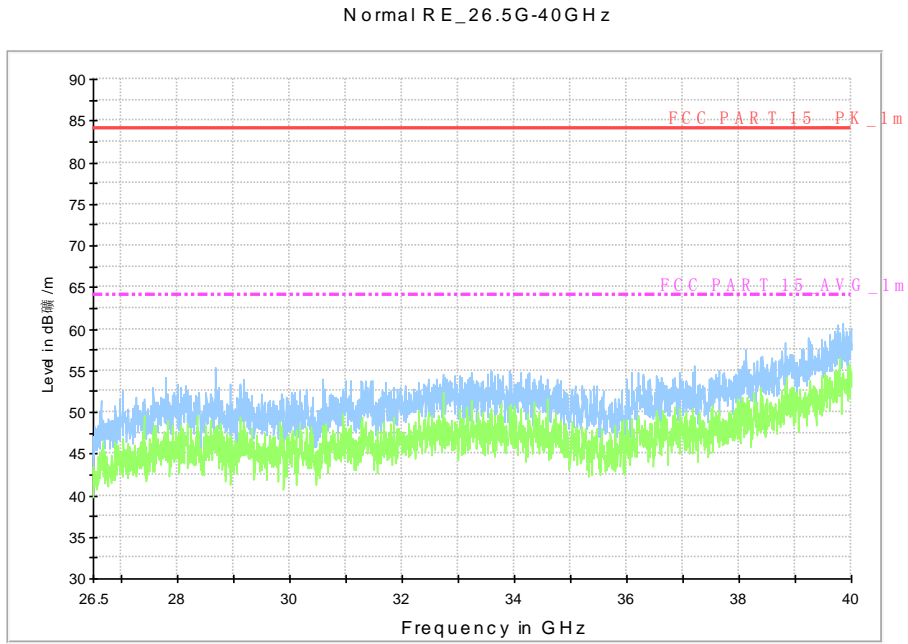


Fig. 68 Radiated Spurious Emission (802.11a, ch56, 26.5 GHz-40 GHz)

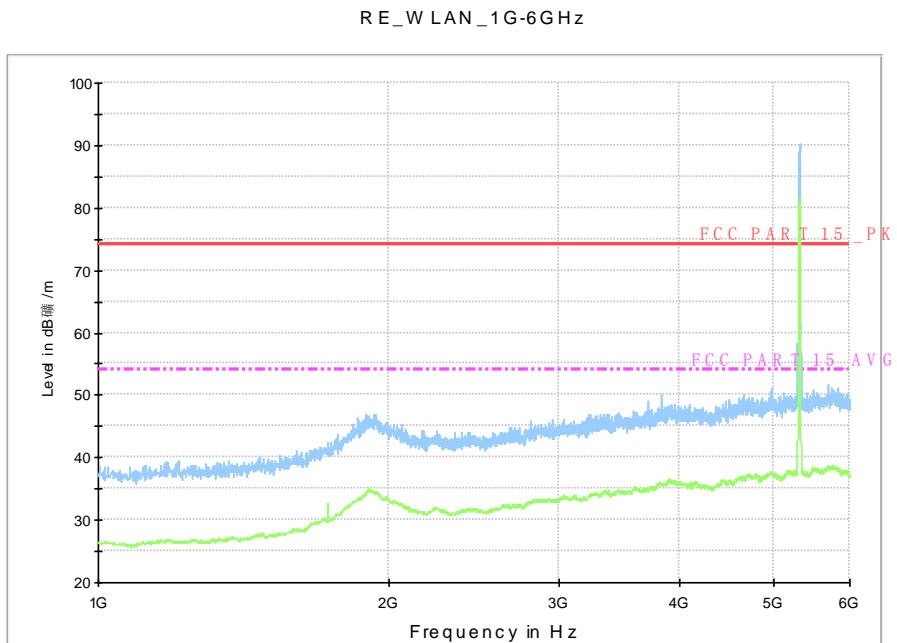


Fig. 69 Radiated Spurious Emission (802.11a, ch64, 1 GHz-6 GHz)

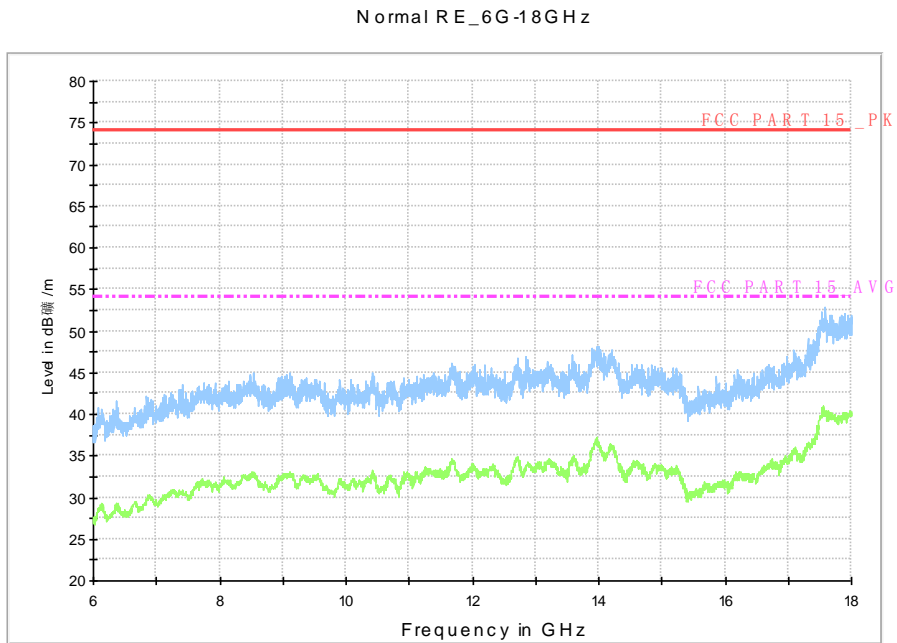


Fig. 70 Radiated Spurious Emission (802.11a, ch64, 6 GHz-18 GHz)

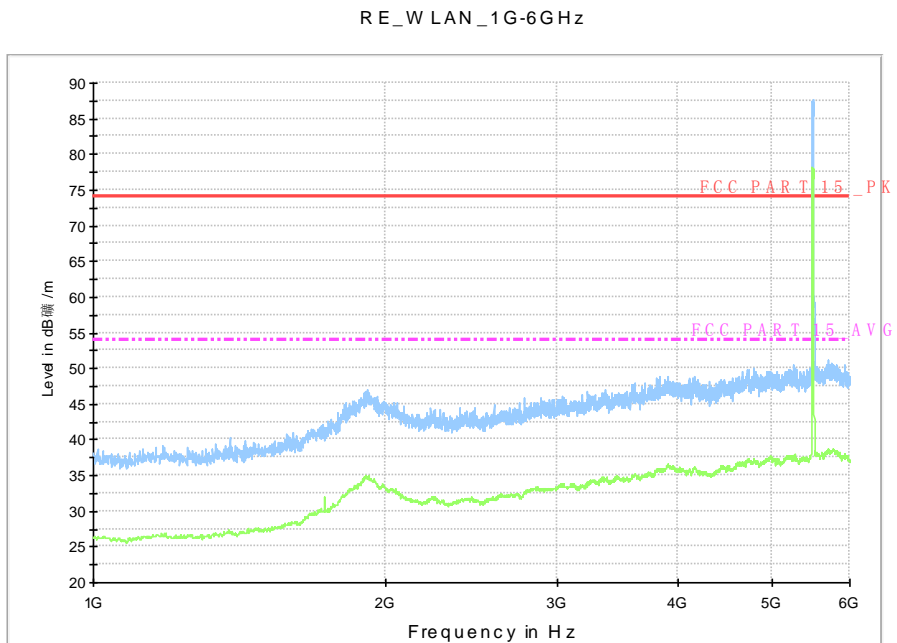


Fig. 71 Radiated Spurious Emission (802.11a, ch100, 1 GHz-6 GHz)

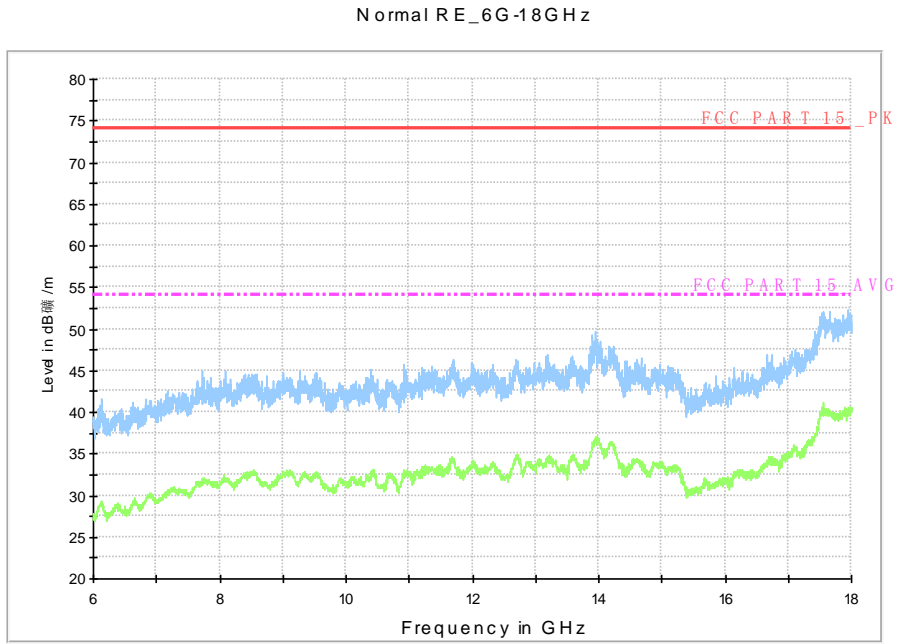


Fig. 72 Radiated Spurious Emission (802.11a, ch100, 6 GHz-18 GHz)

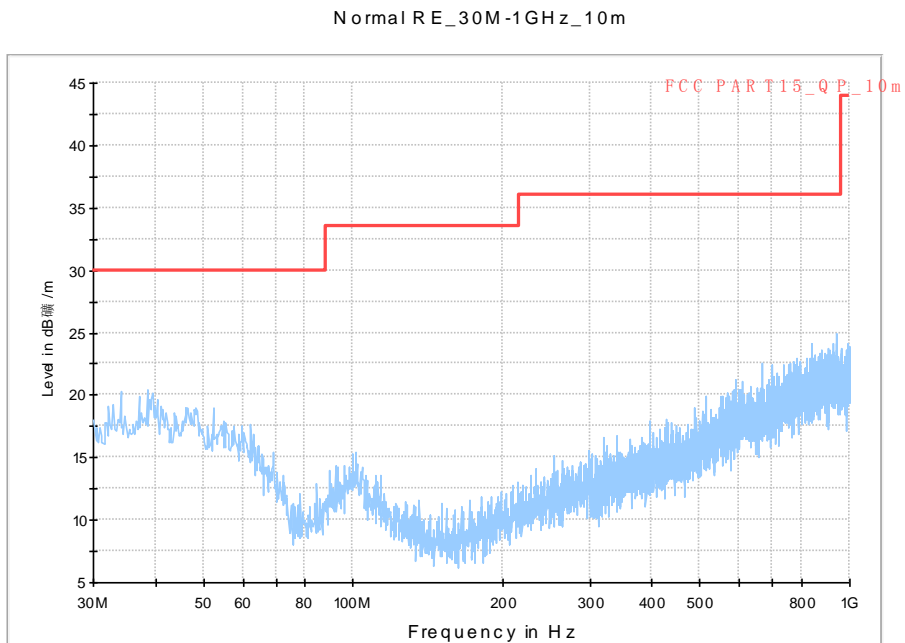


Fig. 73 Radiated Spurious Emission (802.11a, ch120, 30 MHz-1 GHz)

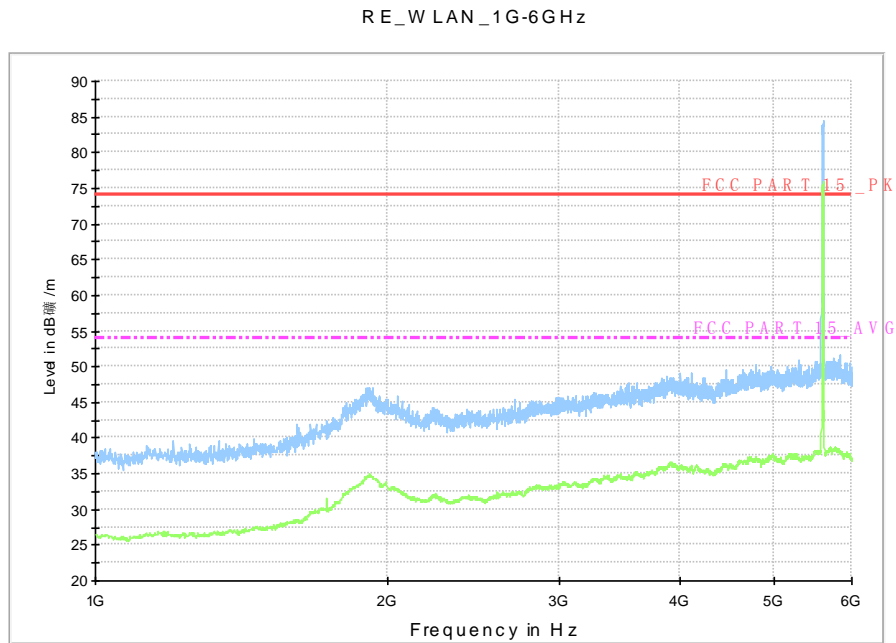


Fig. 74 Radiated Spurious Emission (802.11a, ch120, 1 GHz-6 GHz)

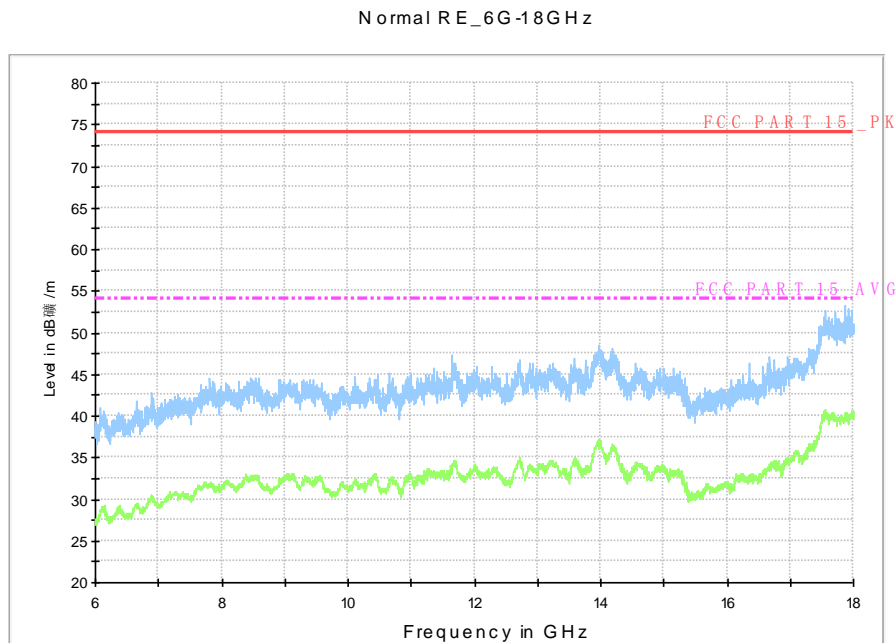


Fig. 75 Radiated Spurious Emission (802.11a, ch120, 6 GHz-18 GHz)

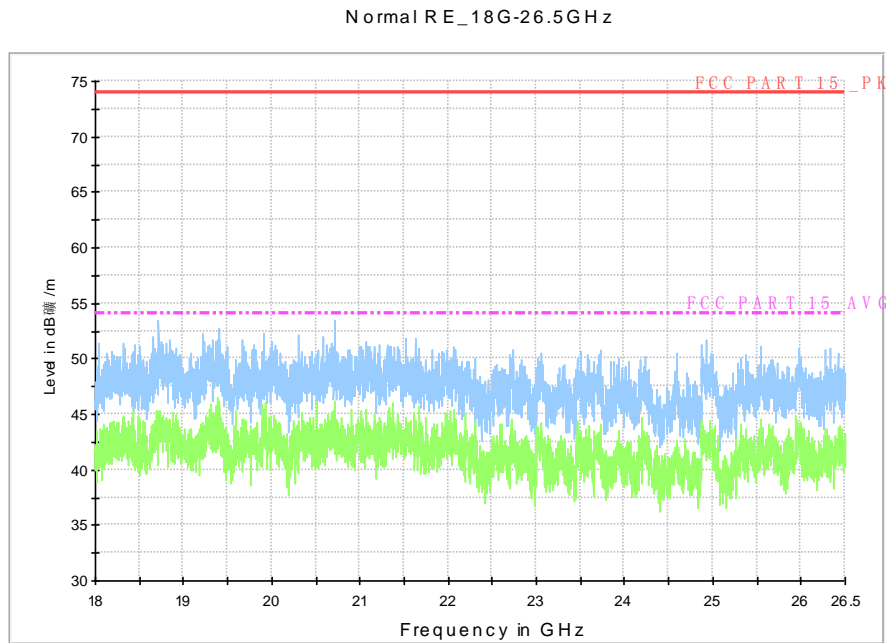


Fig. 76 Radiated Spurious Emission (802.11a, ch120, 18 GHz-26.5 GHz)

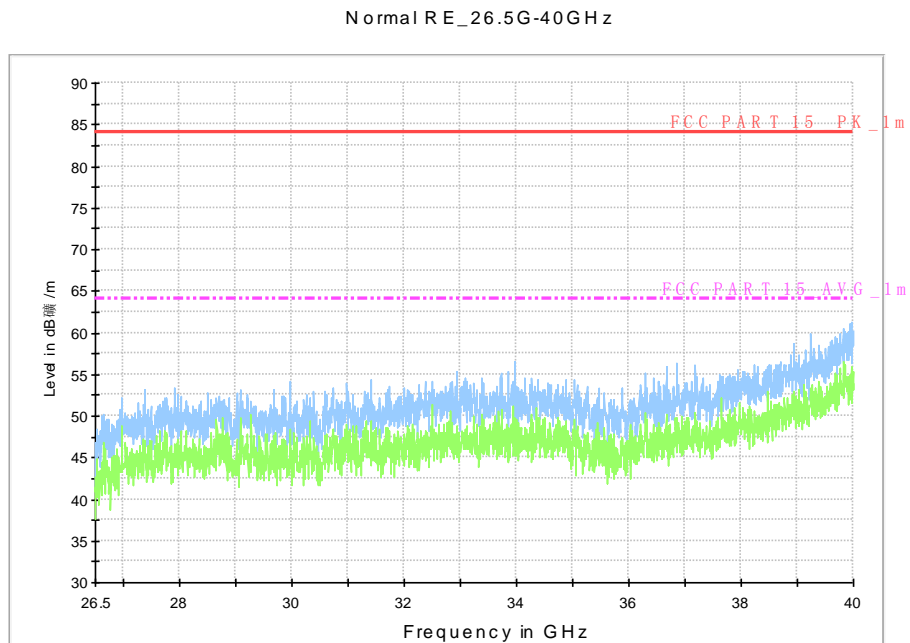


Fig. 77 Radiated Spurious Emission (802.11a, ch120, 26.5 GHz-40 GHz)

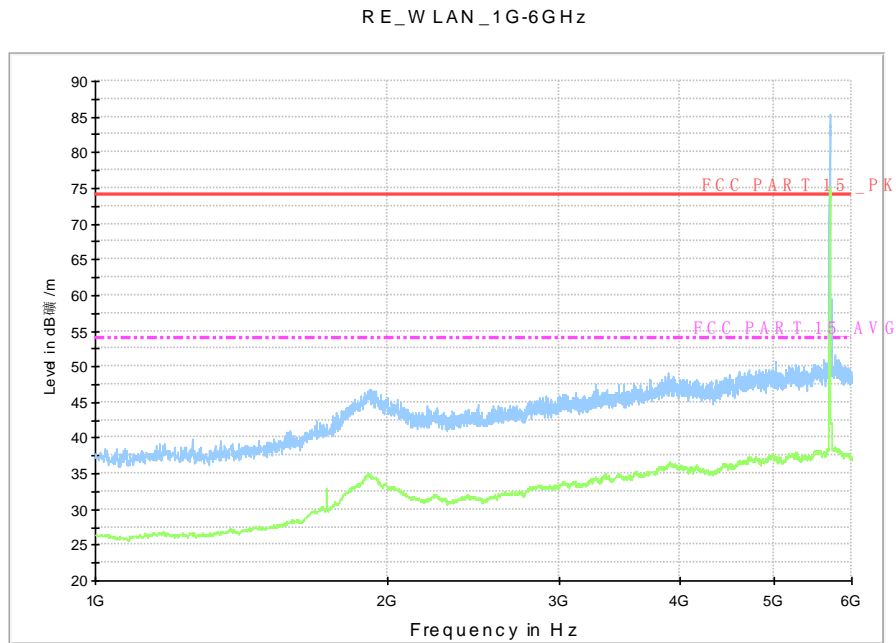


Fig. 78 Radiated Spurious Emission (802.11a, ch140, 1 GHz-6 GHz)

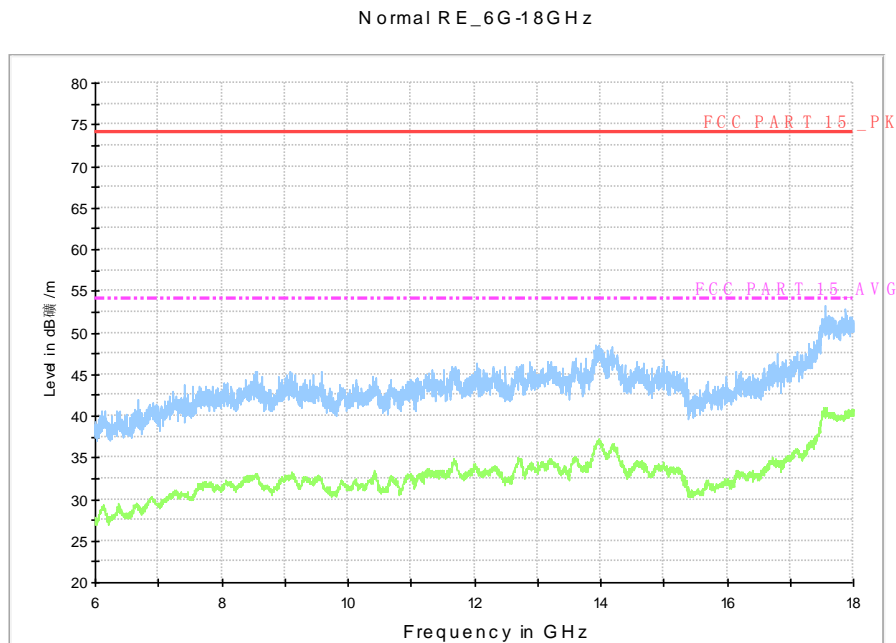


Fig. 79 Radiated Spurious Emission (802.11a, ch140, 6 GHz-18 GHz)

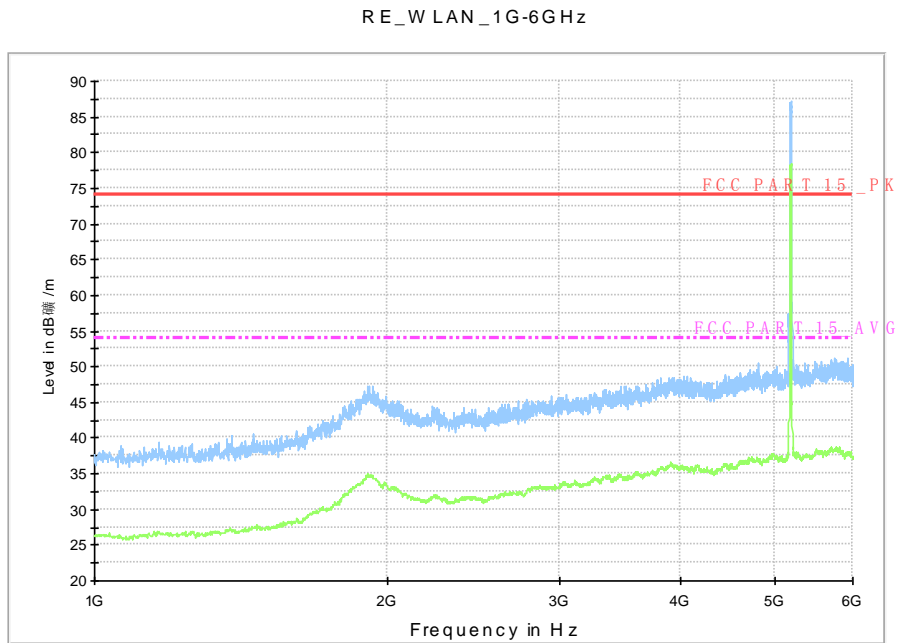


Fig. 80 Radiated Spurious Emission (802.11n-HT20, ch36, 1 GHz-6 GHz)

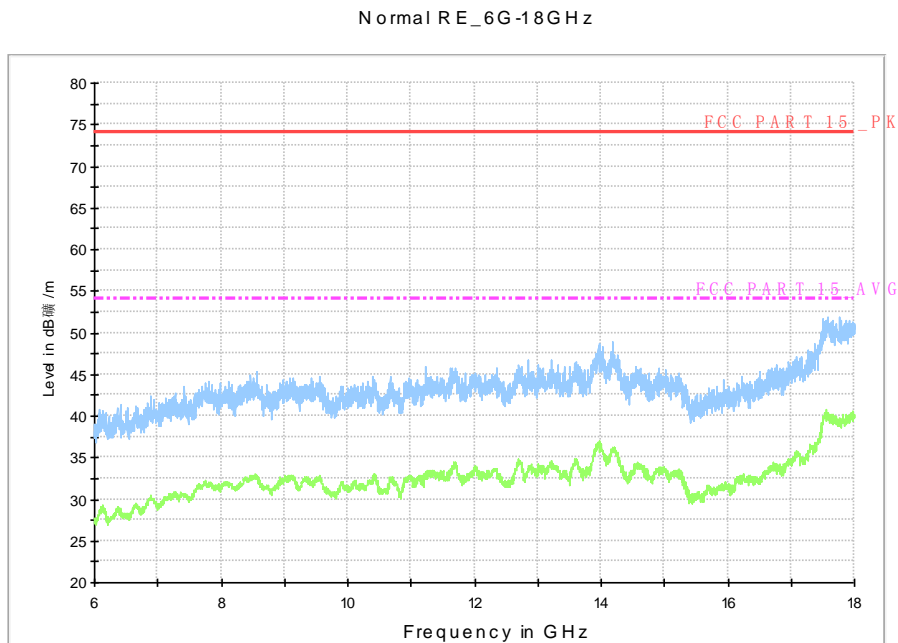


Fig. 81 Radiated Spurious Emission (802.11n-HT20, ch36, 6 GHz-18 GHz)

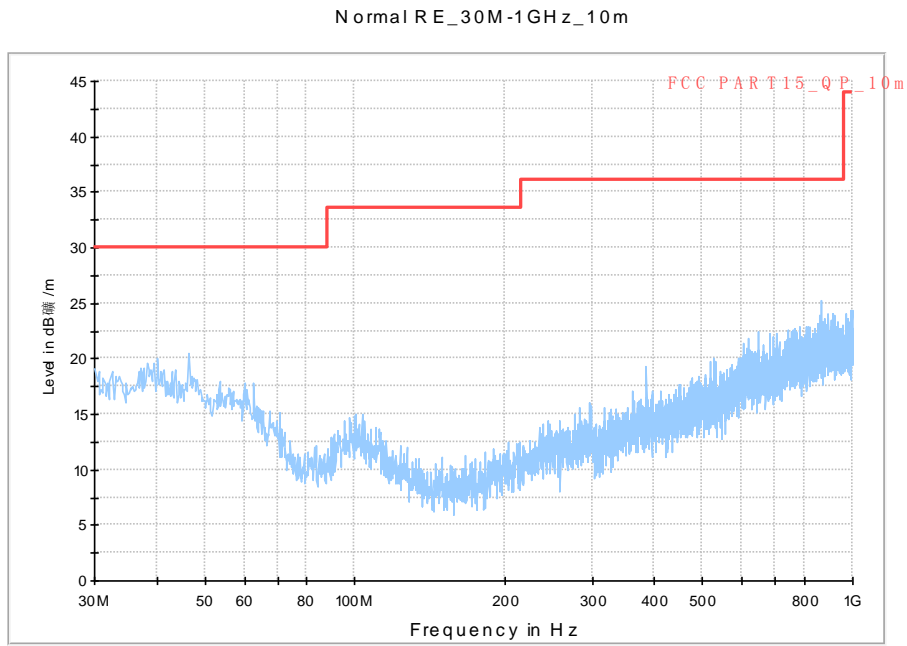


Fig. 82 Radiated Spurious Emission (802.11n-HT20, ch40, 30 MHz-1 GHz)

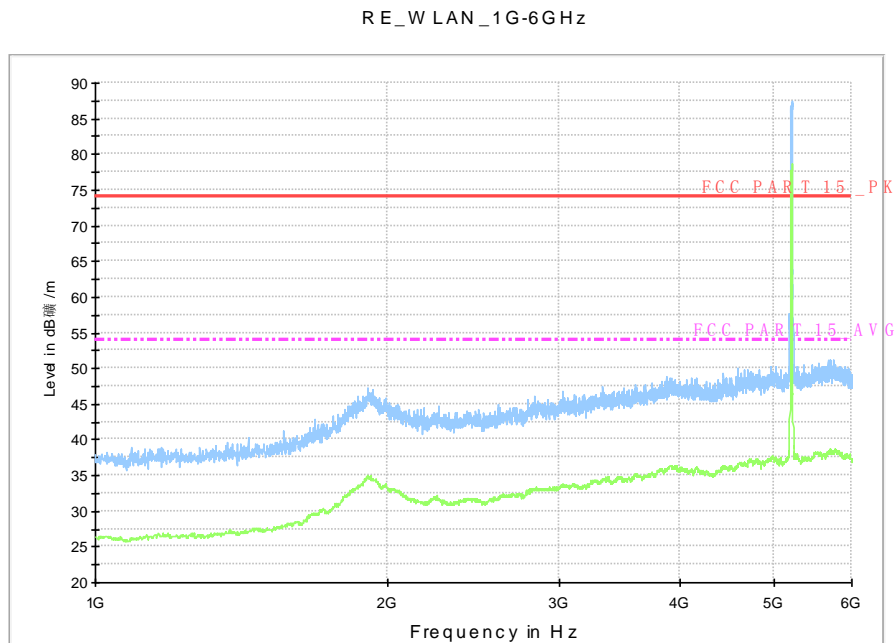


Fig. 83 Radiated Spurious Emission (802.11n-HT20, ch40, 1 GHz-6 GHz)

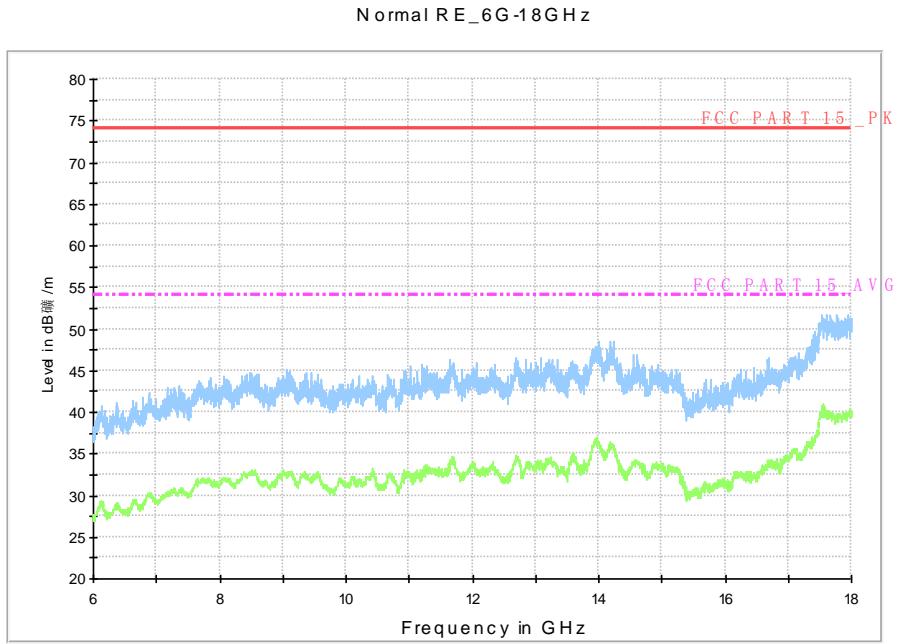


Fig. 84 Radiated Spurious Emission (802.11n-HT20, ch40, 6 GHz-18 GHz)

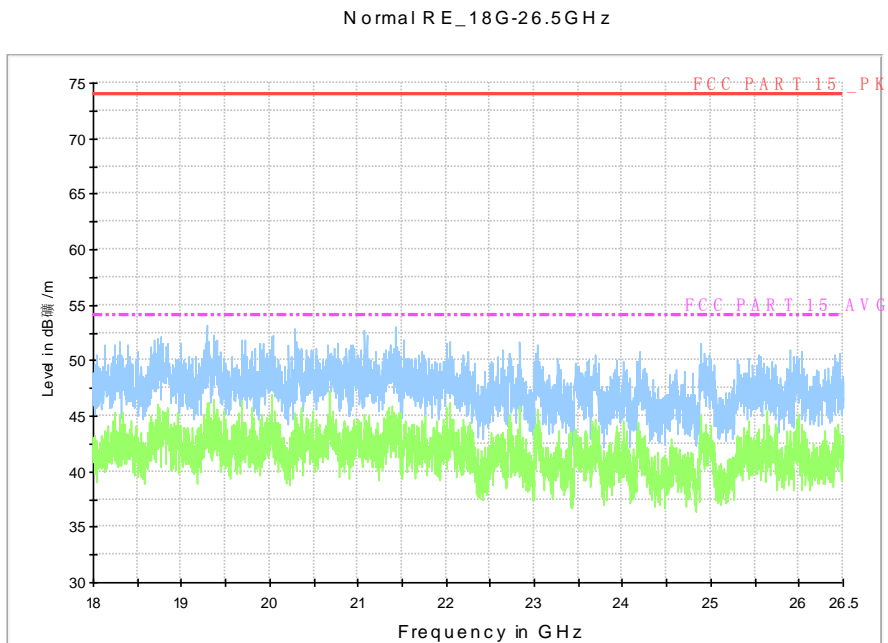


Fig. 85 Radiated Spurious Emission (802.11n-HT20, ch40, 18 GHz-26.5 GHz)

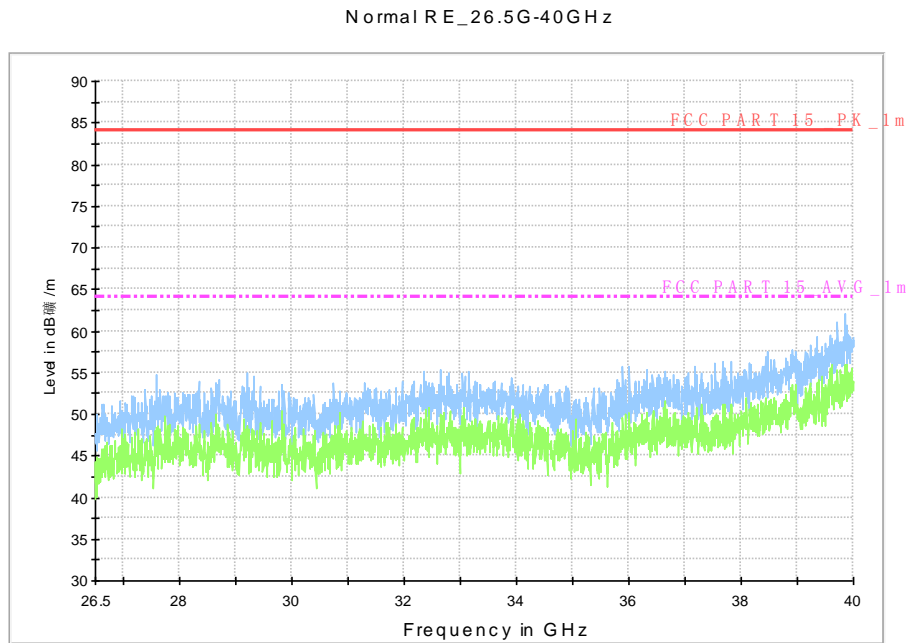


Fig. 86 Radiated Spurious Emission (802.11n-HT20, ch40, 26.5 GHz-40 GHz)

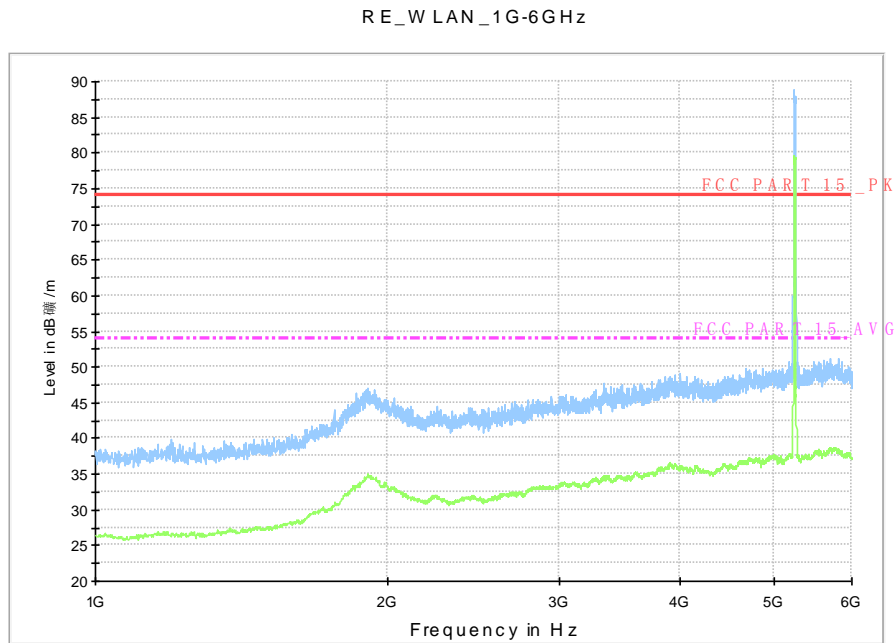


Fig. 87 Radiated Spurious Emission (802.11n-HT20, ch48, 1 GHz-6 GHz)

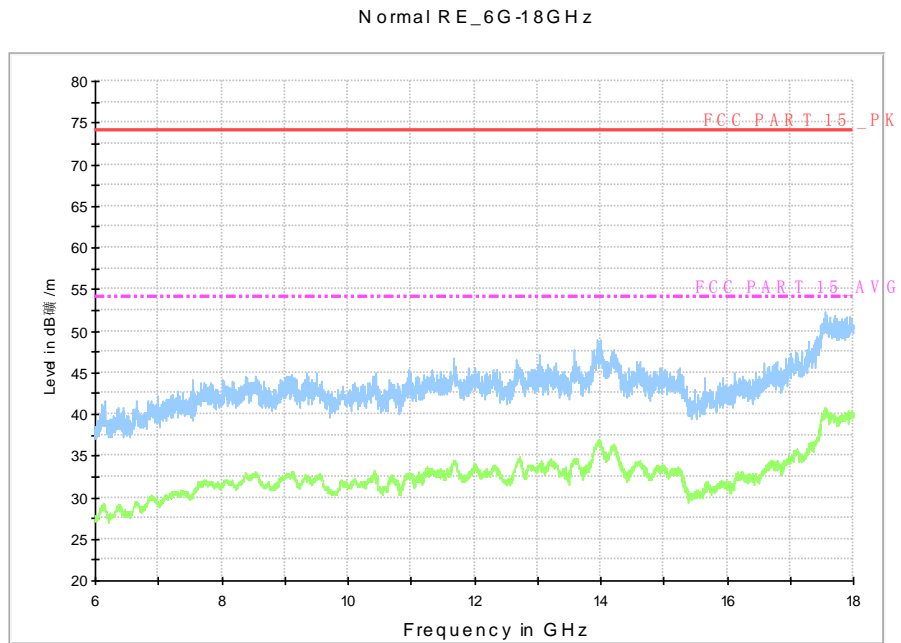


Fig. 88 Radiated Spurious Emission (802.11n-HT20, ch48, 6 GHz-18 GHz)

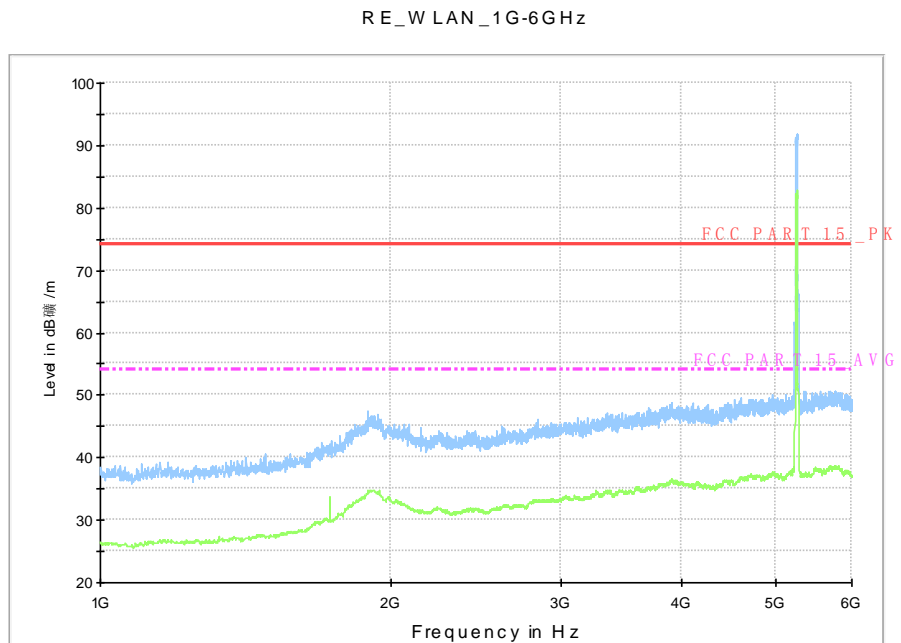


Fig. 89 Radiated Spurious Emission (802.11n-HT20, ch52, 1 GHz-6 GHz)

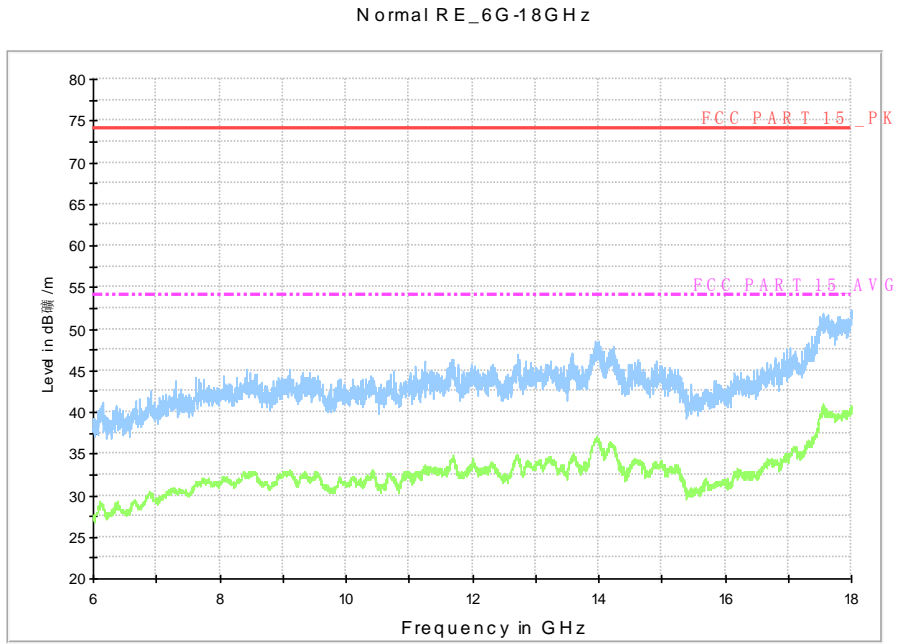


Fig. 90 Radiated Spurious Emission (802.11n-HT20, ch52, 6 GHz-18 GHz)

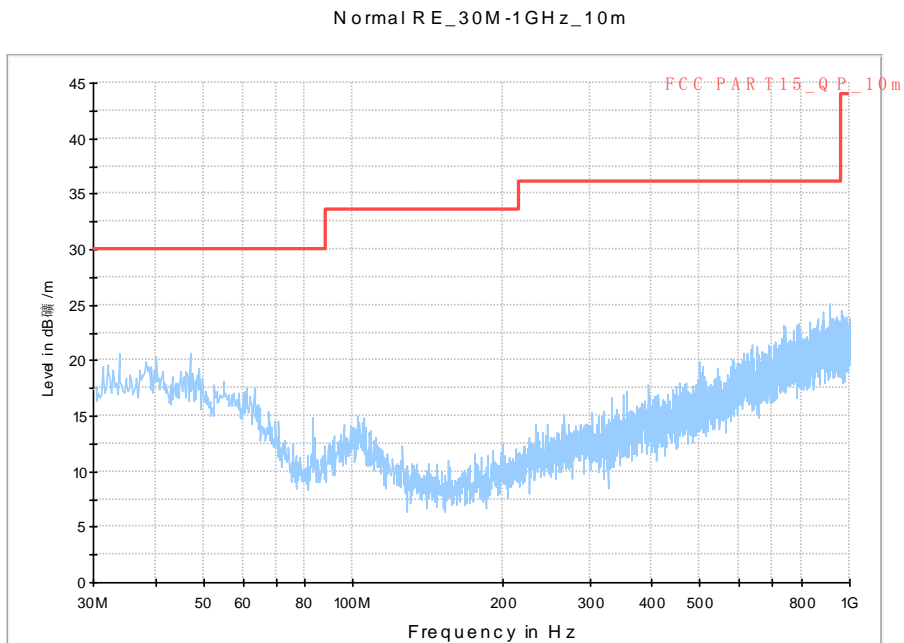


Fig. 91 Radiated Spurious Emission (802.11n-HT20, ch56, 30 MHz-1 GHz)

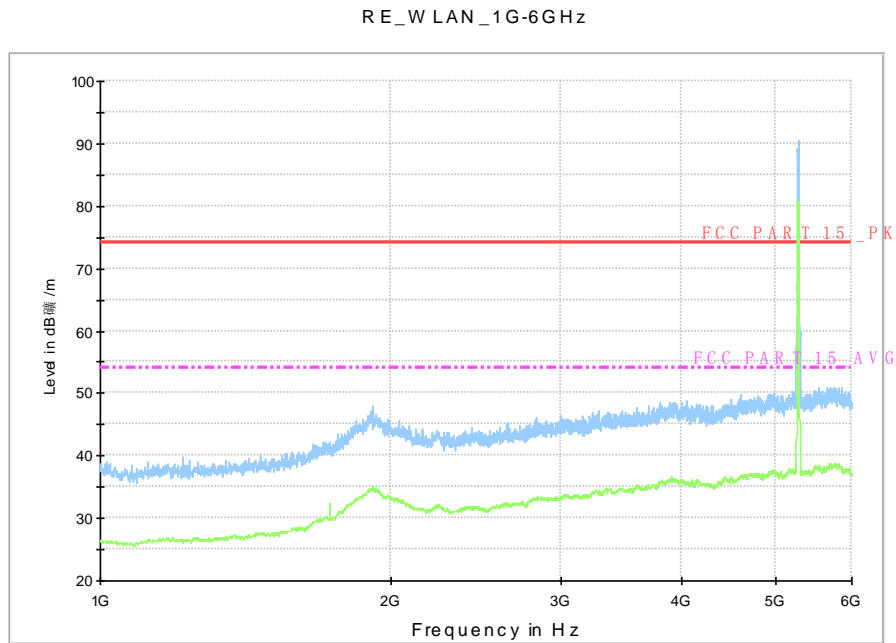


Fig. 92 Radiated Spurious Emission (802.11n-HT20, ch56, 1 GHz-6 GHz)

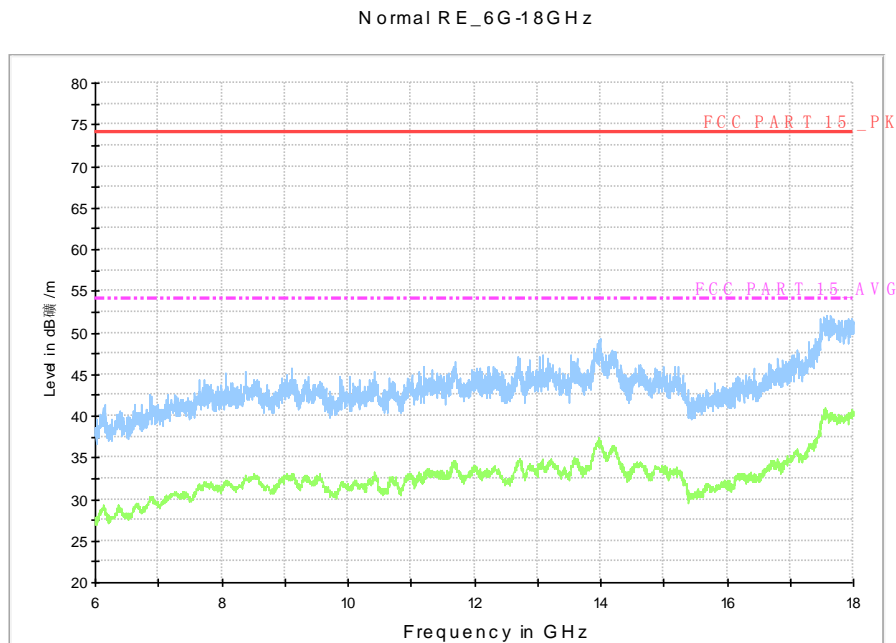


Fig. 93 Radiated Spurious Emission (802.11n-HT20, ch56, 6 GHz-18 GHz)

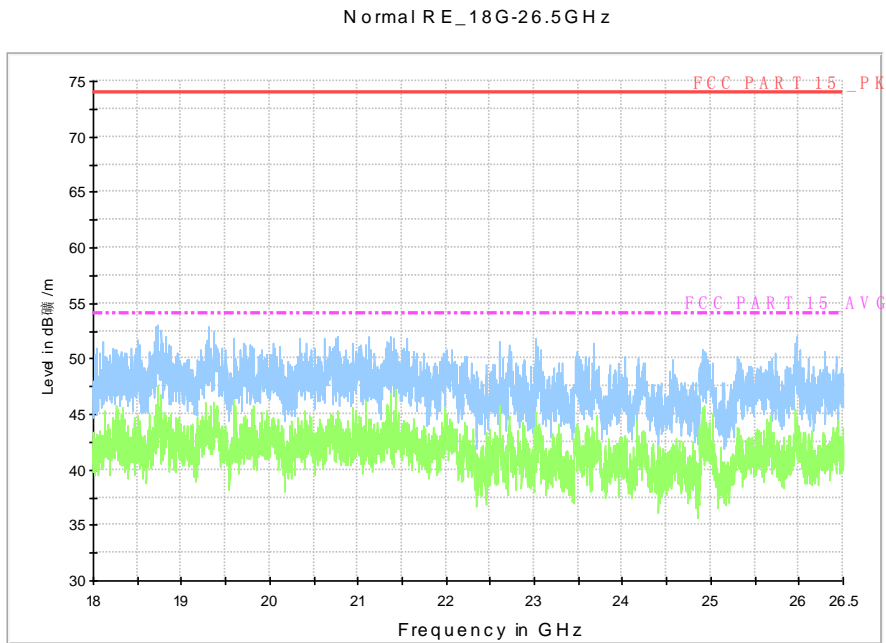


Fig. 94 Radiated Spurious Emission (802.11n-HT20, ch56, 18 GHz-26.5 GHz)

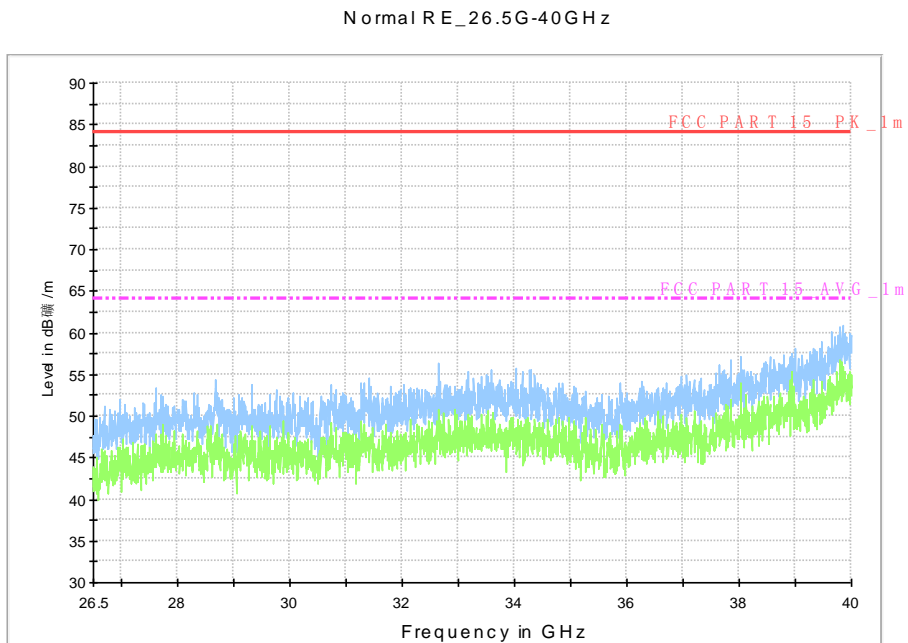


Fig. 95 Radiated Spurious Emission (802.11n-HT20, ch56, 26.5 GHz-40 GHz)

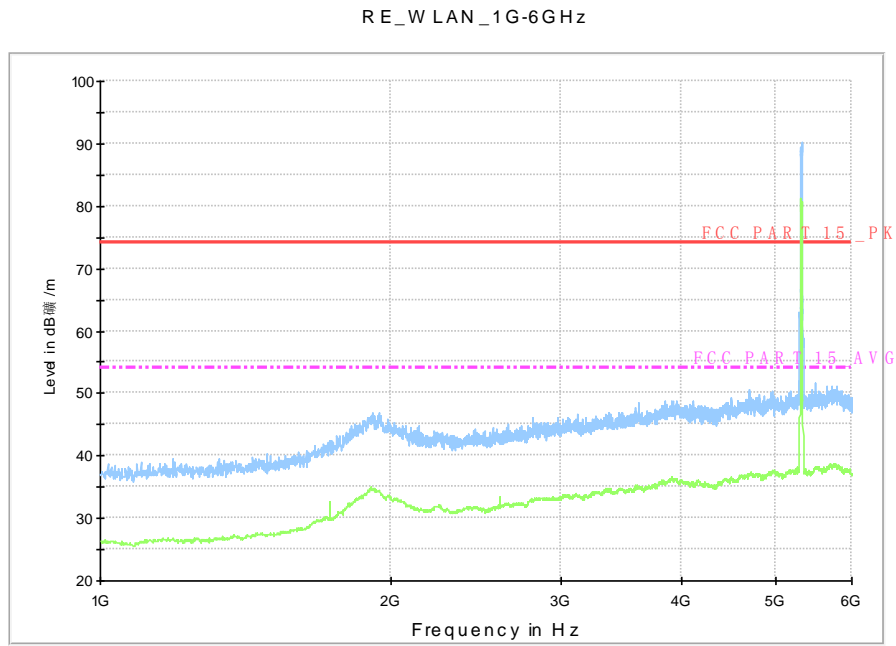


Fig. 96 Radiated Spurious Emission (802.11n-HT20, ch64, 1 GHz-6 GHz)

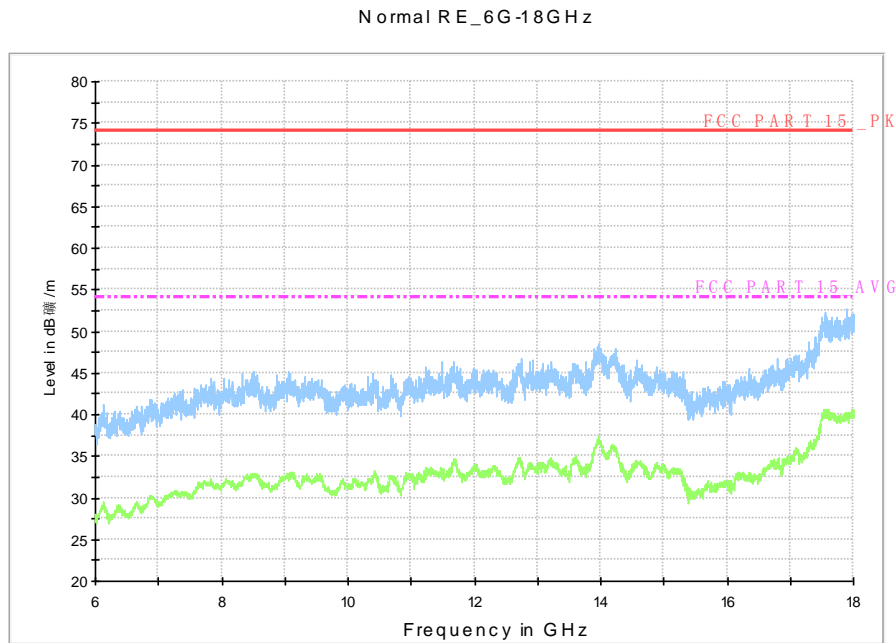


Fig. 97 Radiated Spurious Emission (802.11n-HT20, ch64, 6 GHz-18 GHz)

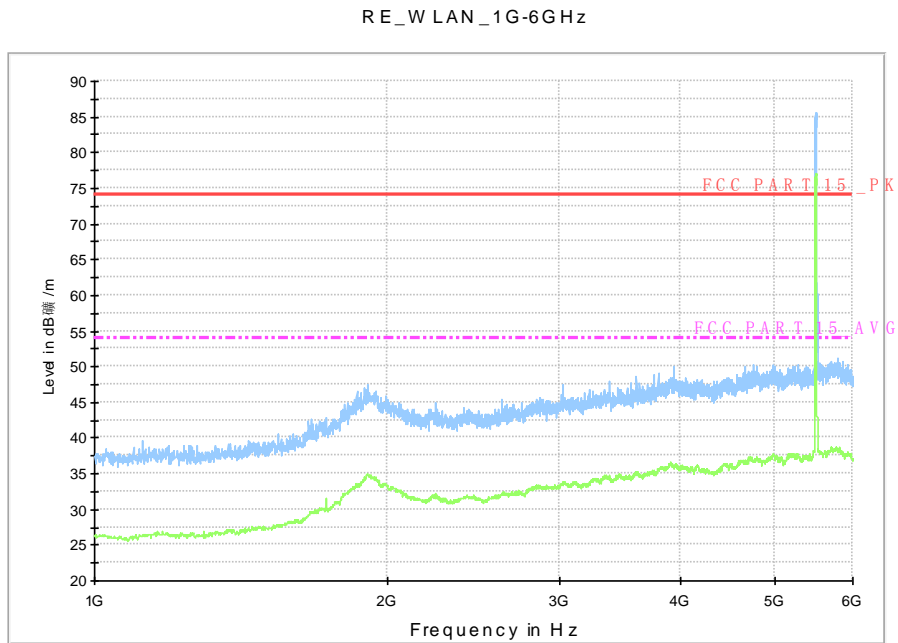


Fig. 98 Radiated Spurious Emission (802.11n-HT20, ch100, 1 GHz-6 GHz)

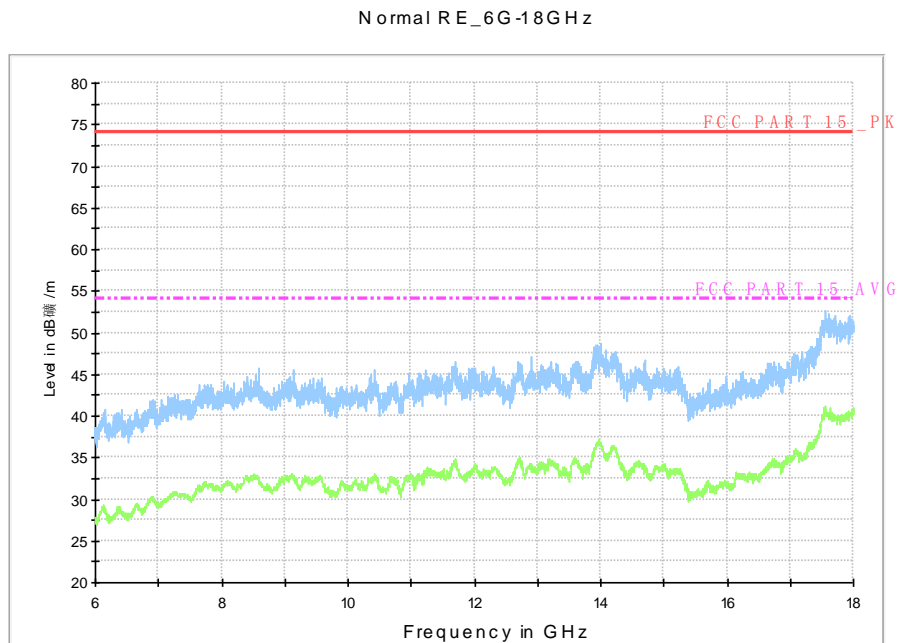


Fig. 99 Radiated Spurious Emission (802.11n-HT20, ch100, 6 GHz-18 GHz)

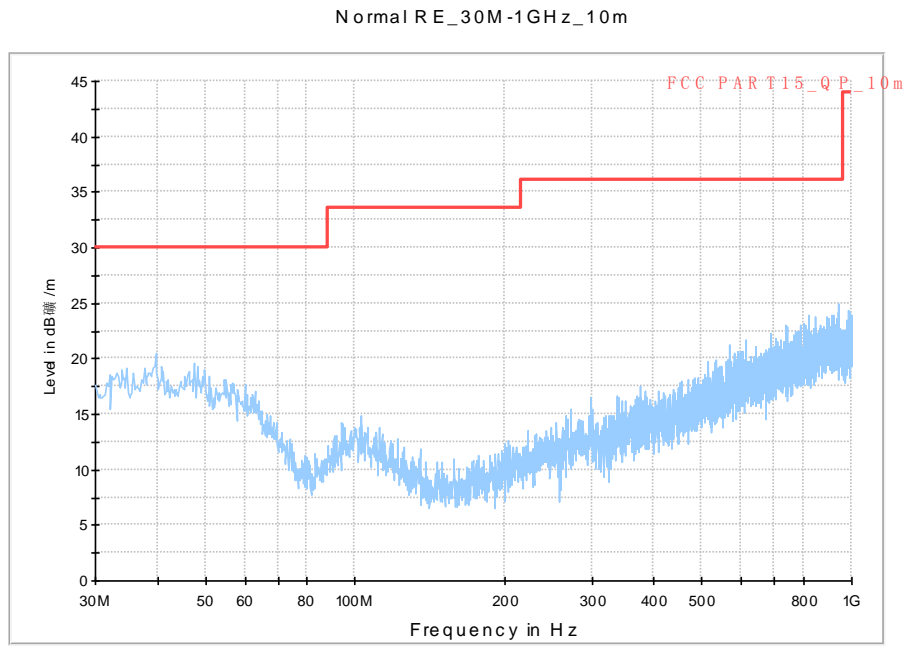


Fig. 100 Radiated Spurious Emission (802.11n-HT20, ch120, 30 MHz-1 GHz)

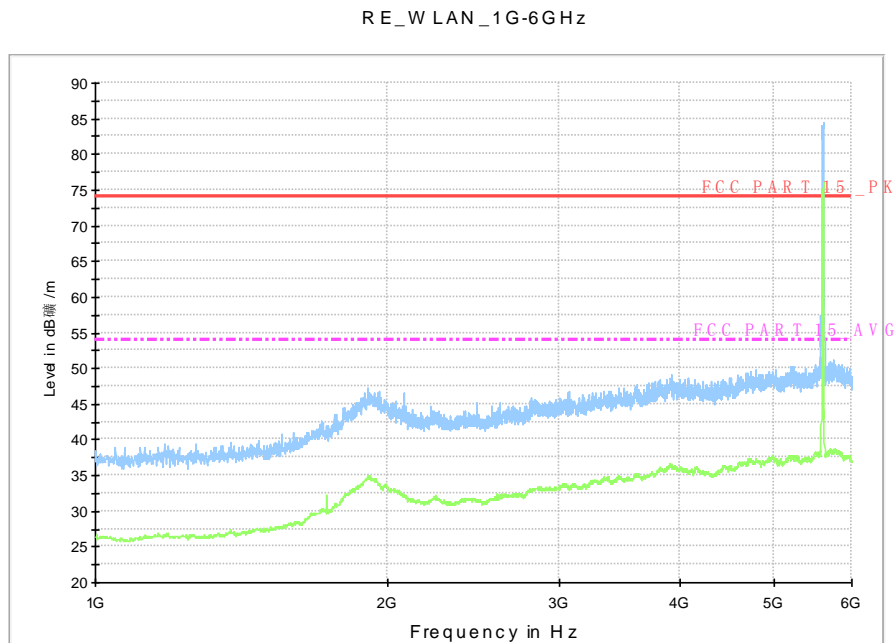


Fig. 101 Radiated Spurious Emission (802.11n-HT20, ch120, 1 GHz-6 GHz)

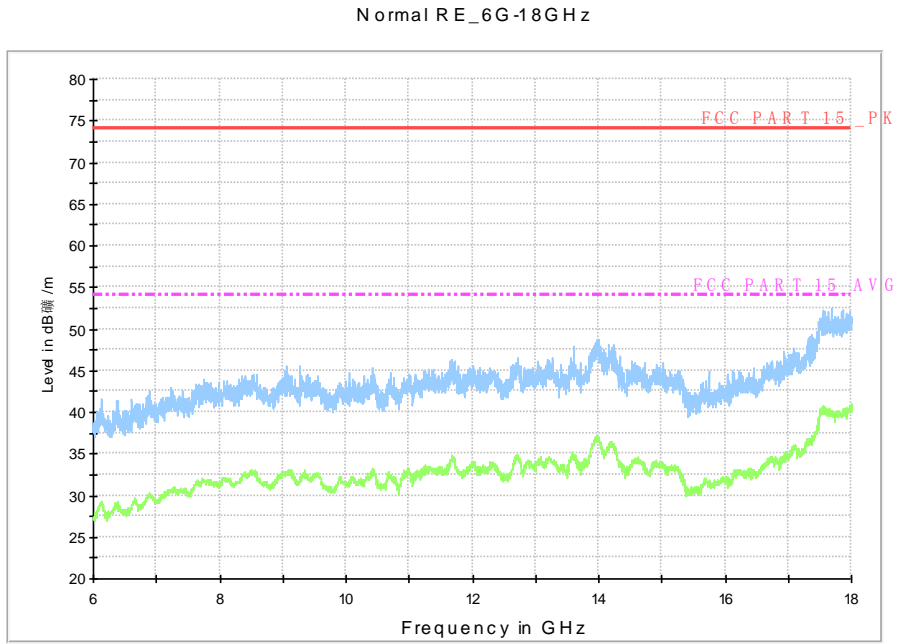


Fig. 102 Radiated Spurious Emission (802.11n-HT20, ch120, 6 GHz-18 GHz)

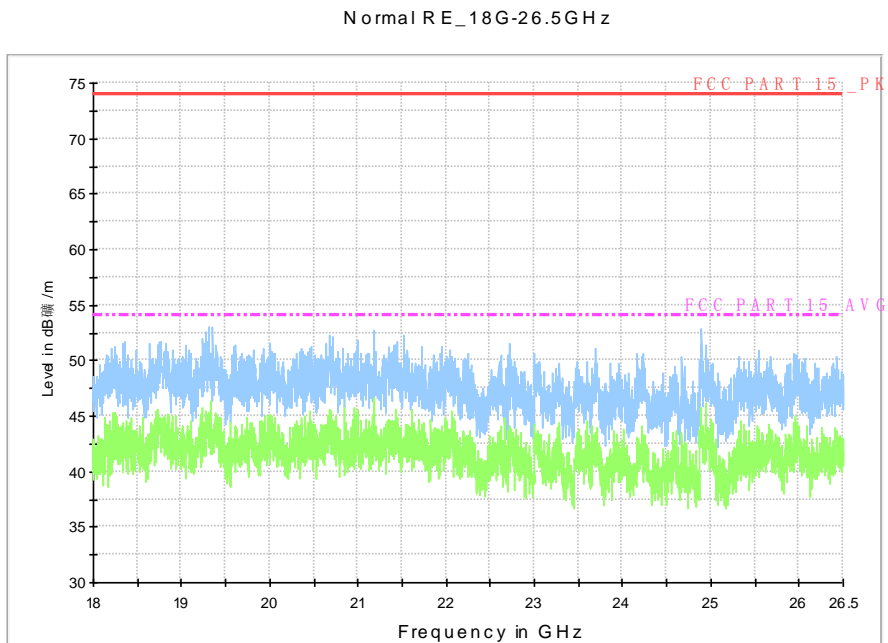


Fig. 103 Radiated Spurious Emission (802.11n-HT20, ch120, 18 GHz-26.5 GHz)

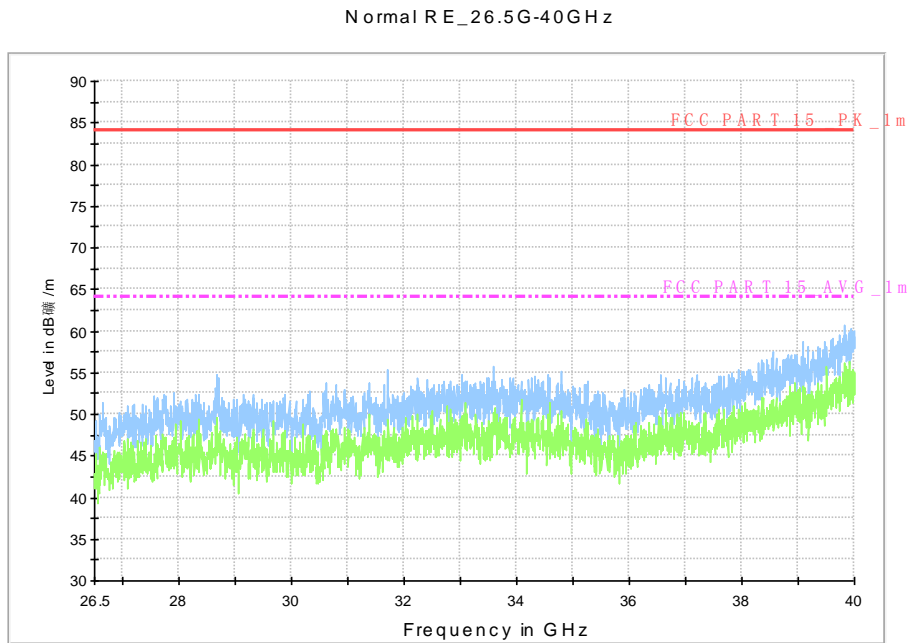


Fig. 104 Radiated Spurious Emission (802.11n-HT20, ch120, 26.5 GHz-40 GHz)

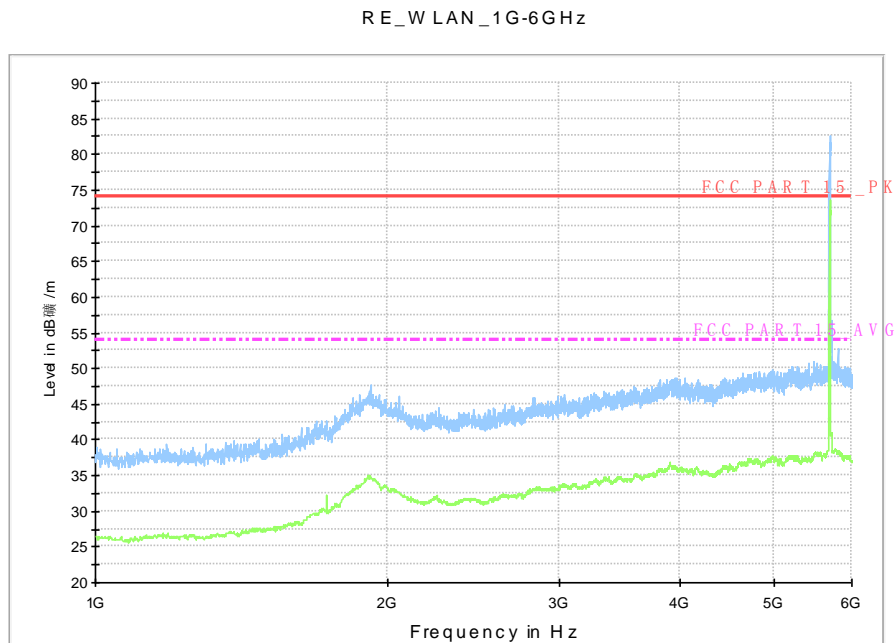


Fig. 105 Radiated Spurious Emission (802.11n-HT20, ch140, 1 GHz-6 GHz)

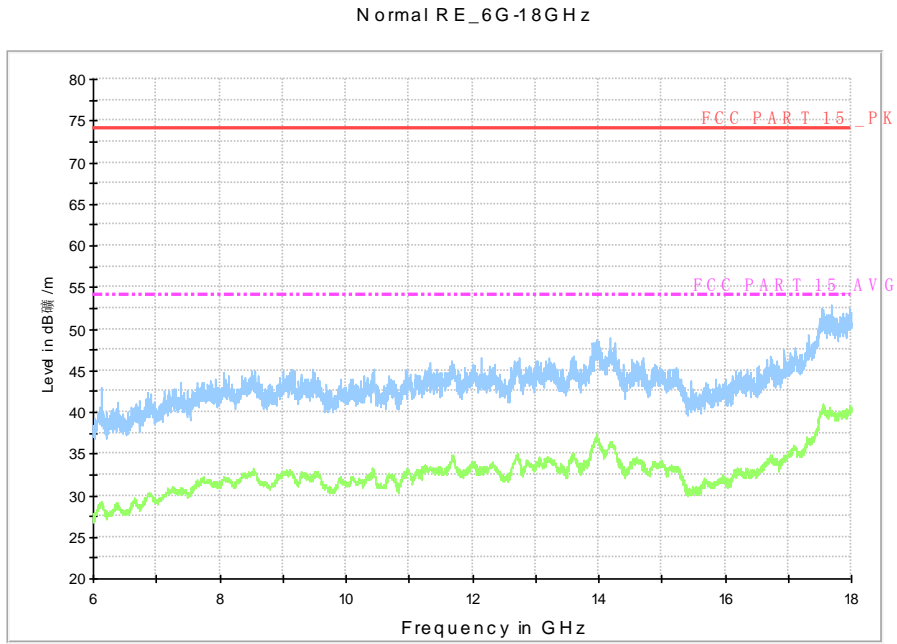


Fig. 106 Radiated Spurious Emission (802.11n-HT20, ch140, 6 GHz-18 GHz)

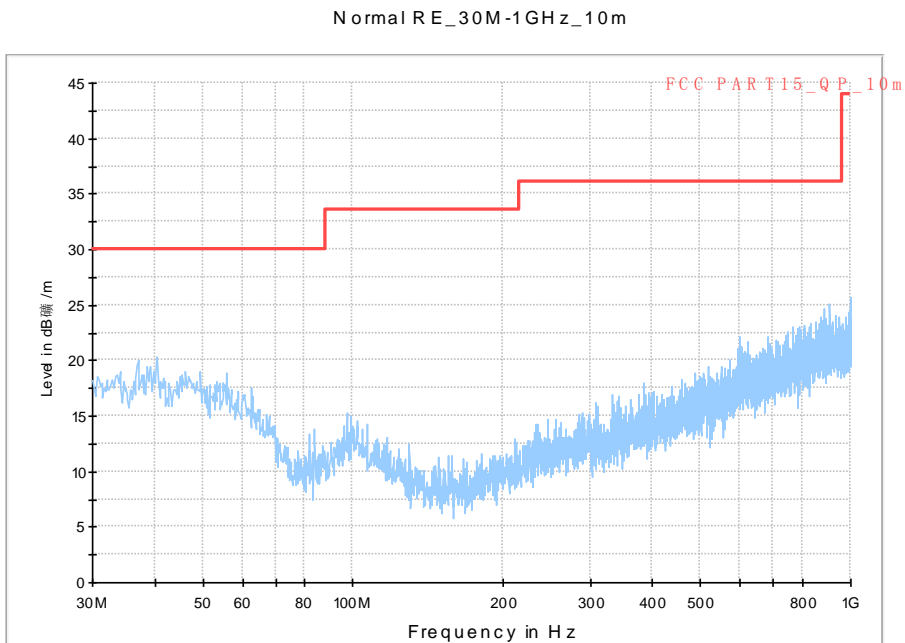


Fig. 107 Radiated Spurious Emission (802.11n-HT40, ch38, 30 MHz-1 GHz)

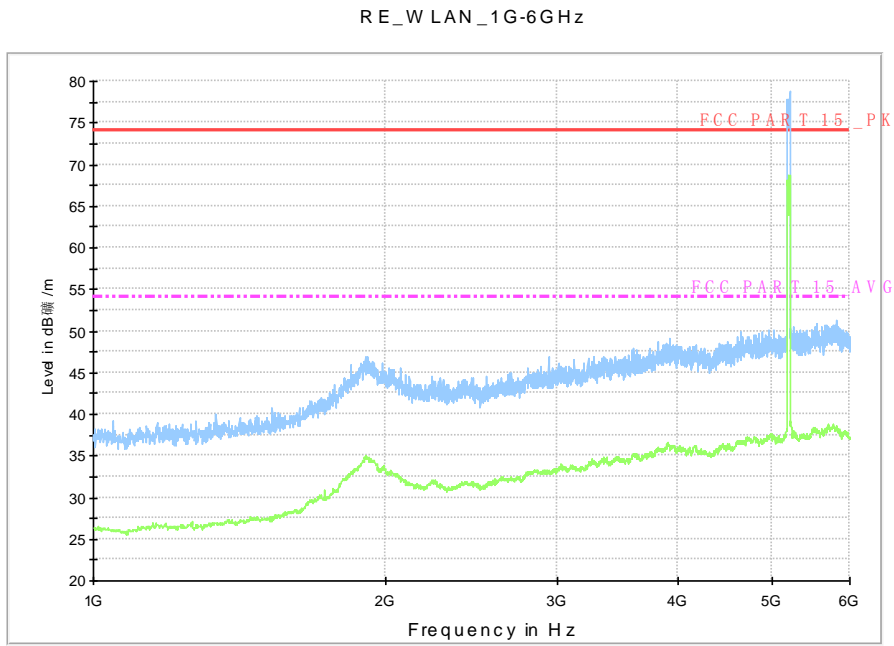


Fig. 108 Radiated Spurious Emission (802.11n-HT40, ch38, 1 GHz-6 GHz)

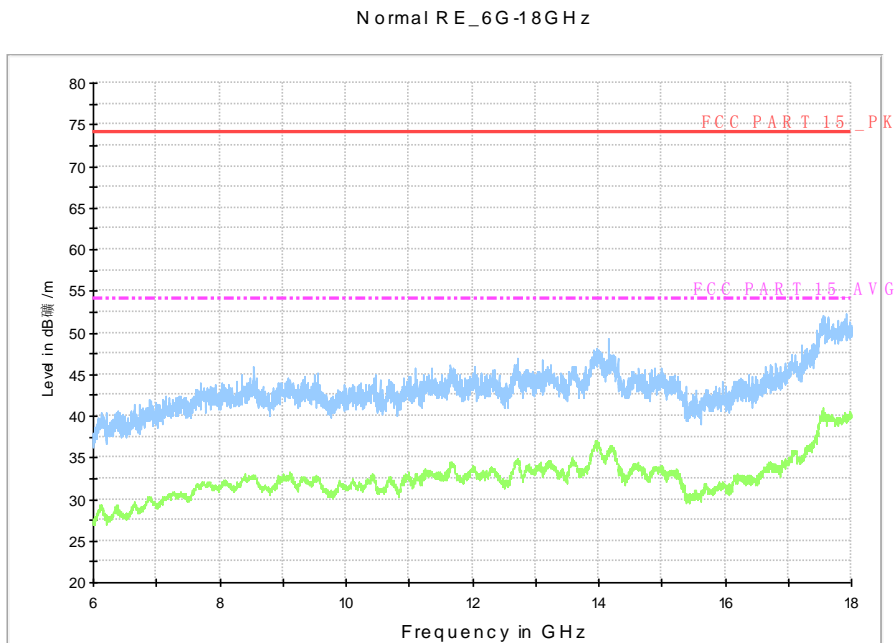


Fig. 109 Radiated Spurious Emission (802.11n-HT40, ch38, 6 GHz-18 GHz)

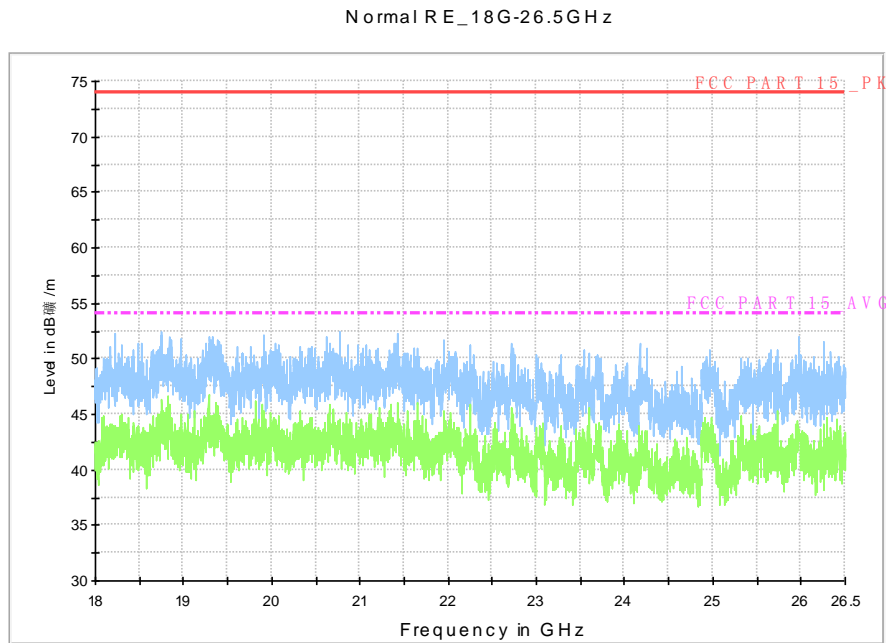


Fig. 110 Radiated Spurious Emission (802.11n-HT40, ch38, 18 GHz-26.5 GHz)

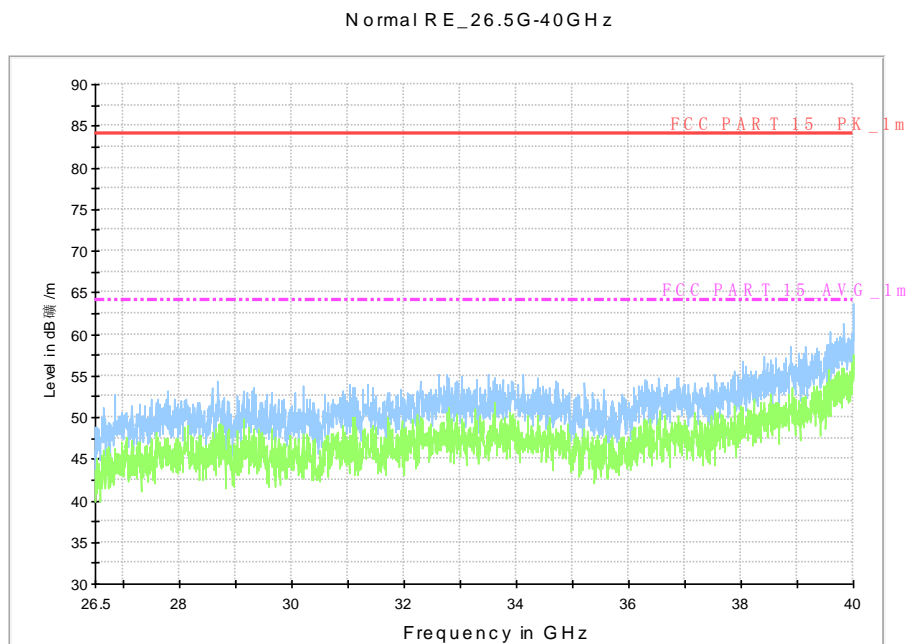


Fig. 111 Radiated Spurious Emission (802.11n-HT40, ch38, 26.5 GHz-40 GHz)

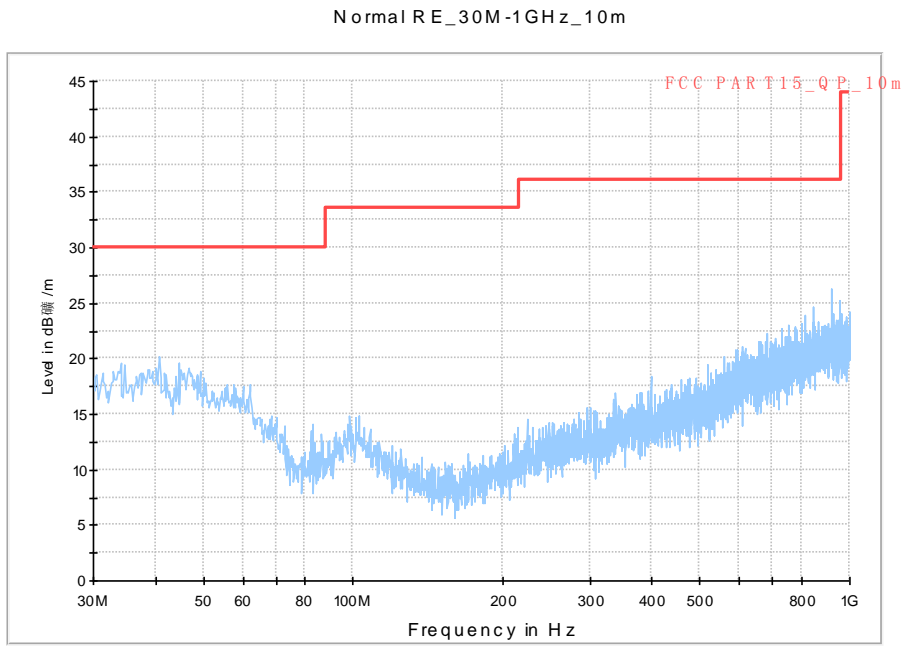


Fig. 112 Radiated Spurious Emission (802.11n-HT40, ch46, 30 MHz-1 GHz)

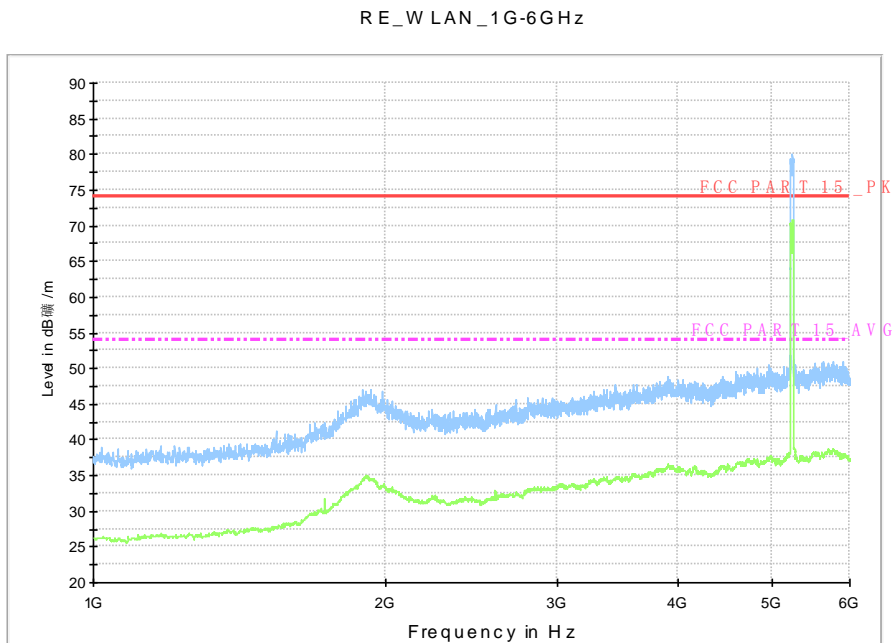


Fig. 113 Radiated Spurious Emission (802.11n-HT40, ch46, 1 GHz-6 GHz)

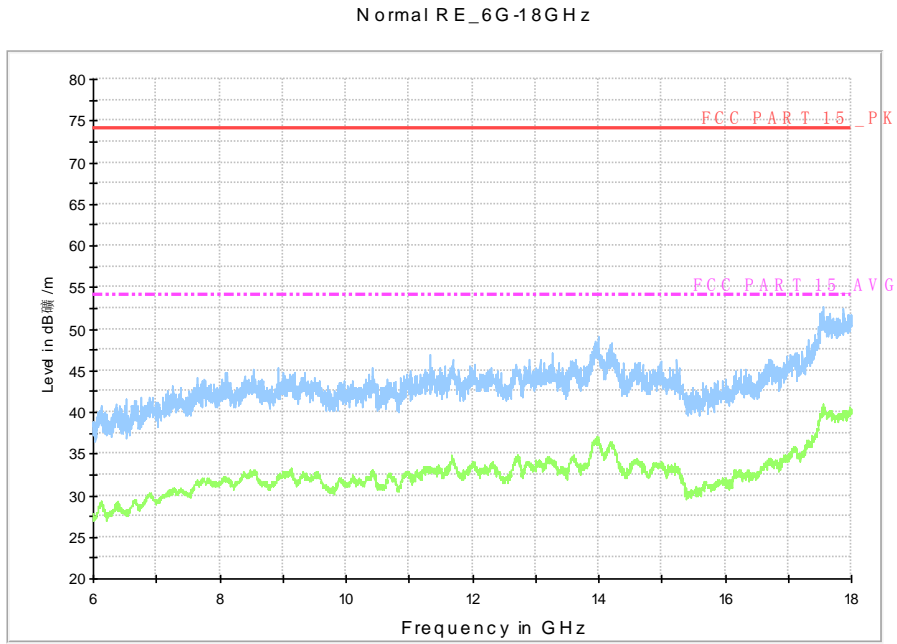


Fig. 114 Radiated Spurious Emission (802.11n-HT40, ch46, 6 GHz-18 GHz)

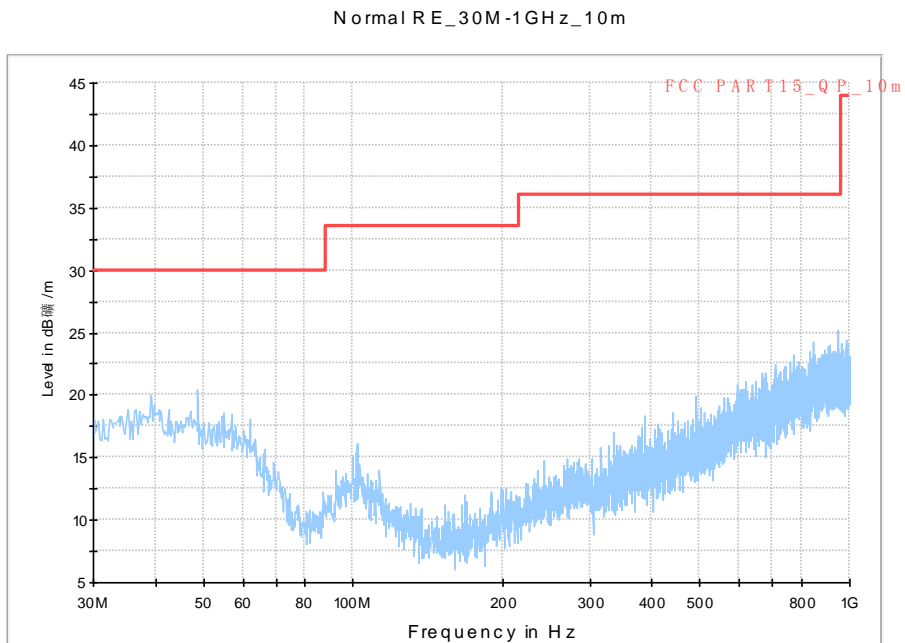


Fig. 115 Radiated Spurious Emission (802.11n-HT40, ch54, 30 MHz-1 GHz)

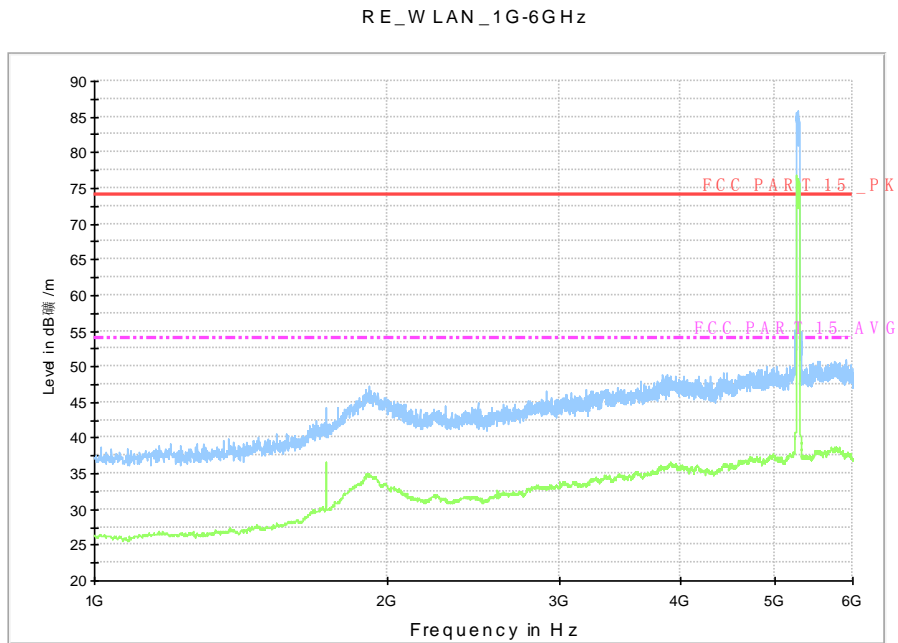


Fig. 116 Radiated Spurious Emission (802.11n-HT40, ch54, 1 GHz-6 GHz)

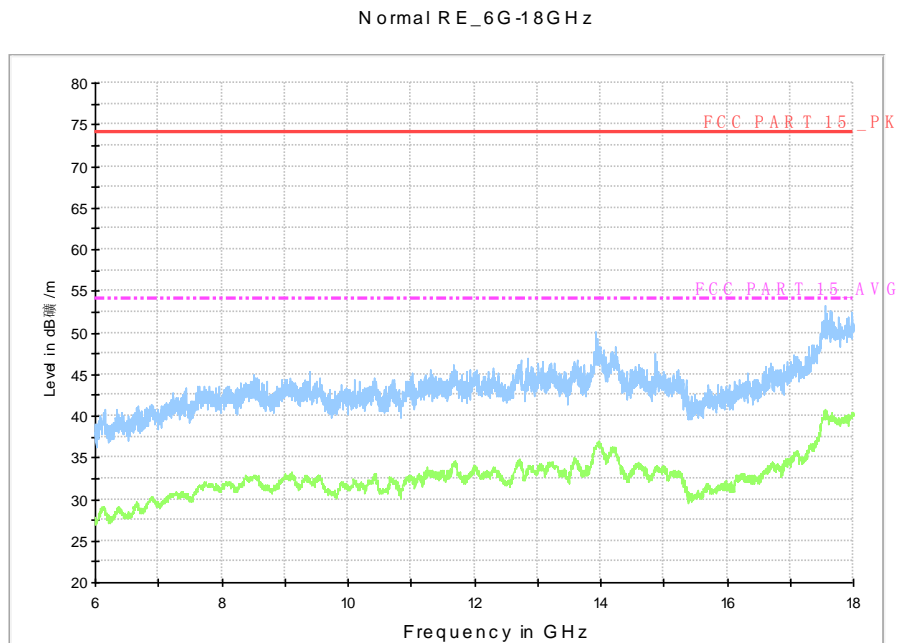


Fig. 117 Radiated Spurious Emission (802.11n-HT40, ch54, 6 GHz-18 GHz)

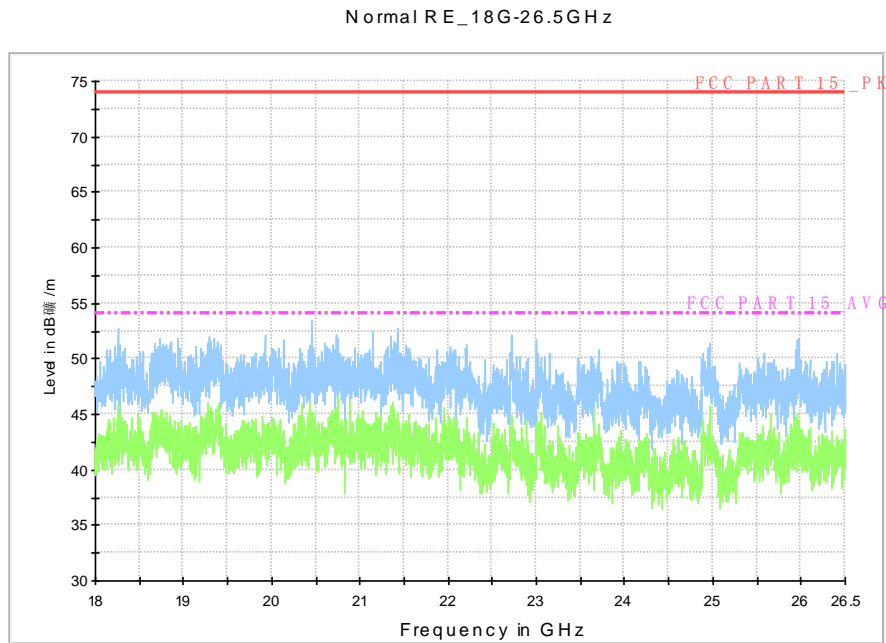


Fig. 118 Radiated Spurious Emission (802.11n-HT40, ch54, 18 GHz-26.5 GHz)

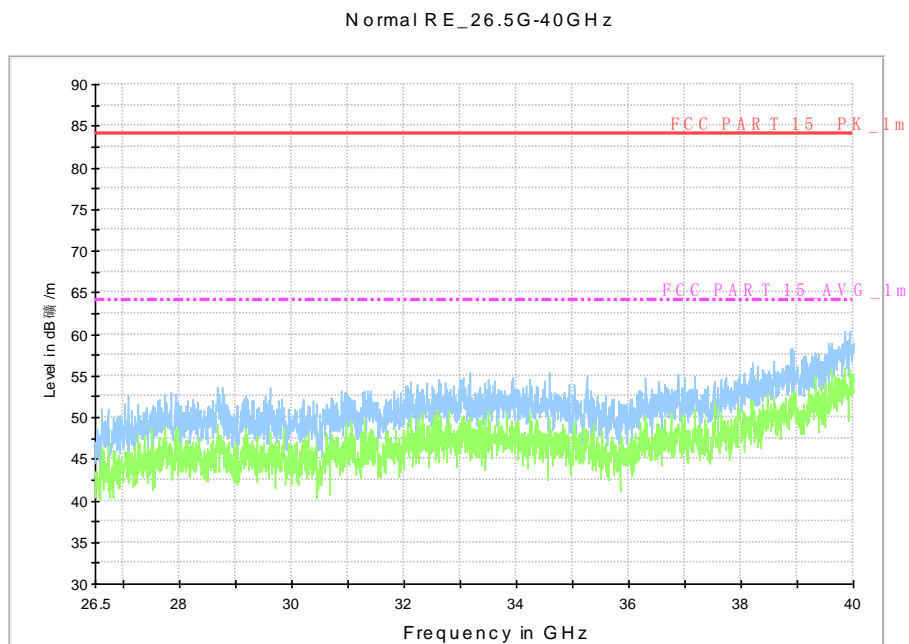


Fig. 119 Radiated Spurious Emission (802.11n-HT40, ch54, 26.5 GHz-40 GHz)

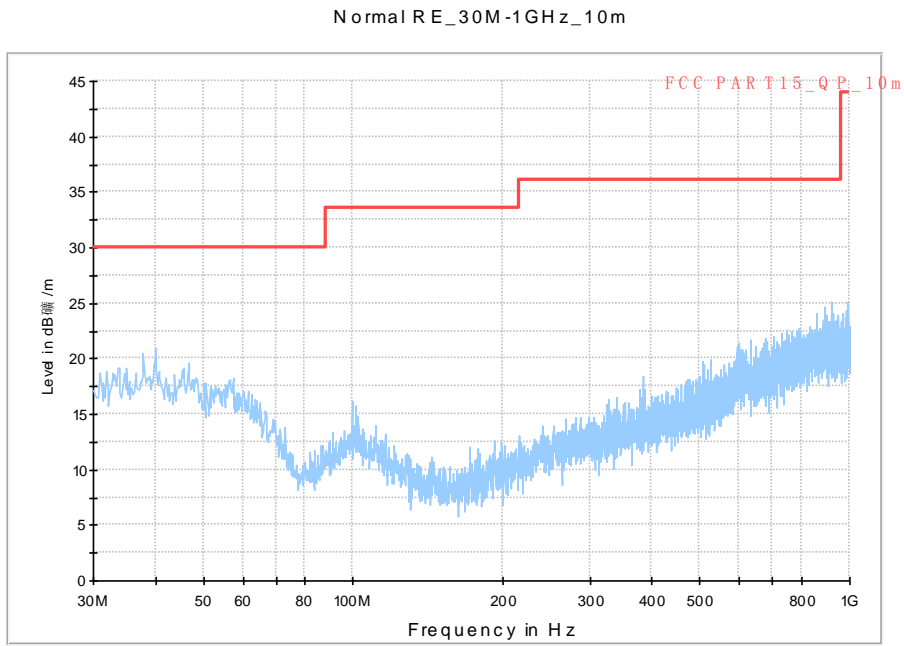


Fig. 120 Radiated Spurious Emission (802.11n-HT40, ch62, 30 MHz-1 GHz)

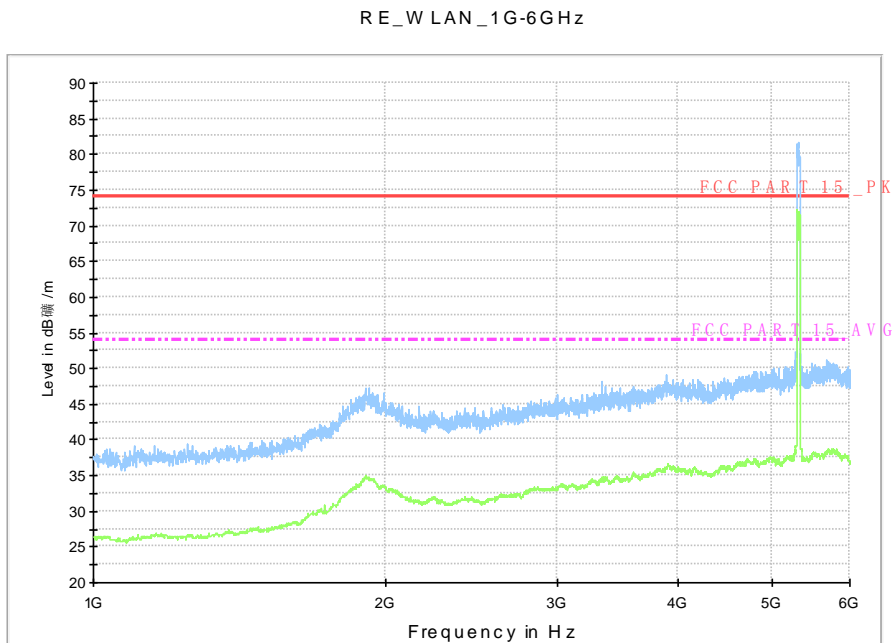


Fig. 121 Radiated Spurious Emission (802.11n-HT40, ch62, 1 GHz-6 GHz)

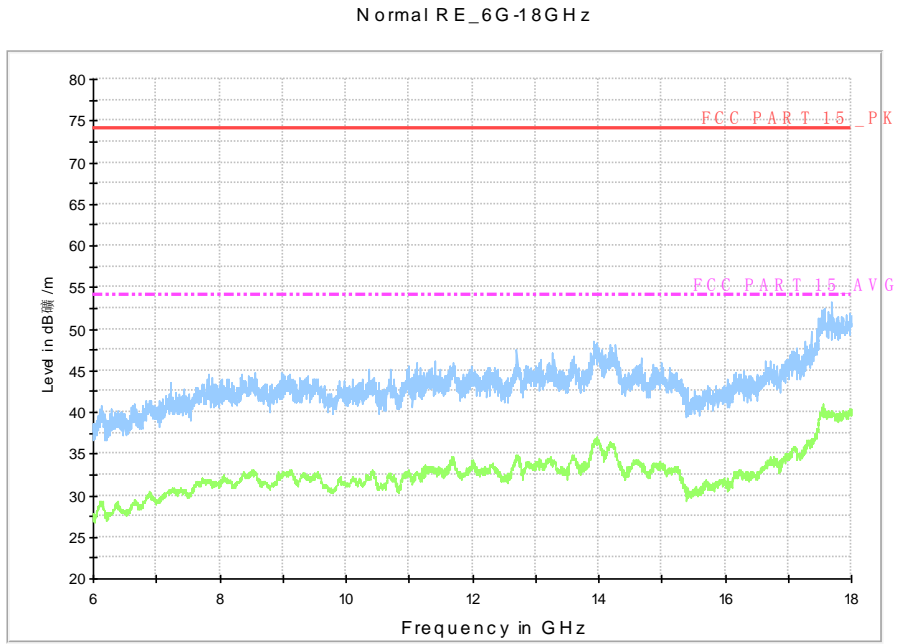


Fig. 122 Radiated Spurious Emission (802.11n-HT40, ch62, 6 GHz-18 GHz)

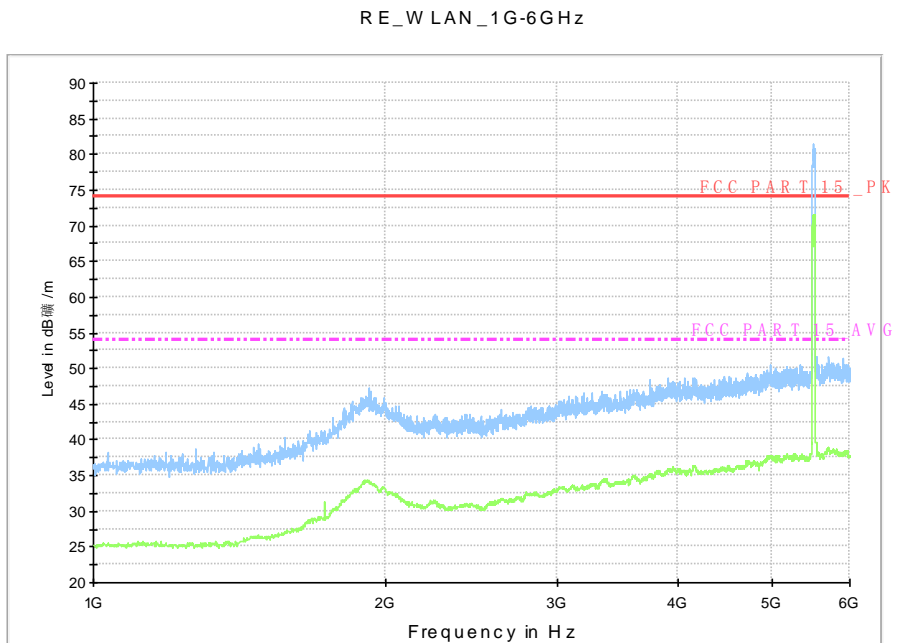


Fig. 123 Radiated Spurious Emission (802.11n-HT40, ch102, 1 GHz-6 GHz)

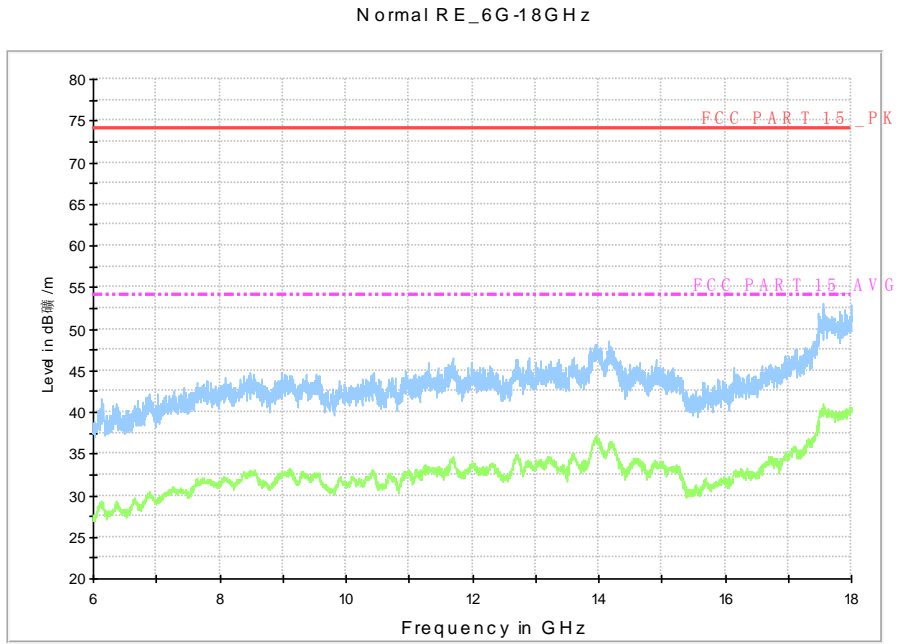


Fig. 124 Radiated Spurious Emission (802.11n-HT40, ch102, 6 GHz-18 GHz)

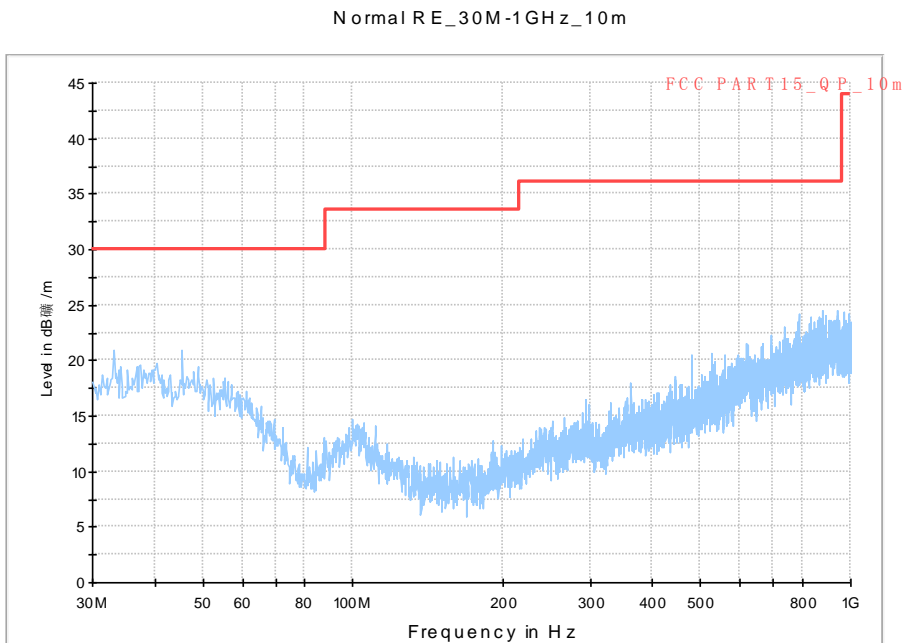


Fig. 125 Radiated Spurious Emission (802.11n-HT40, ch118, 30 MHz-1 GHz)

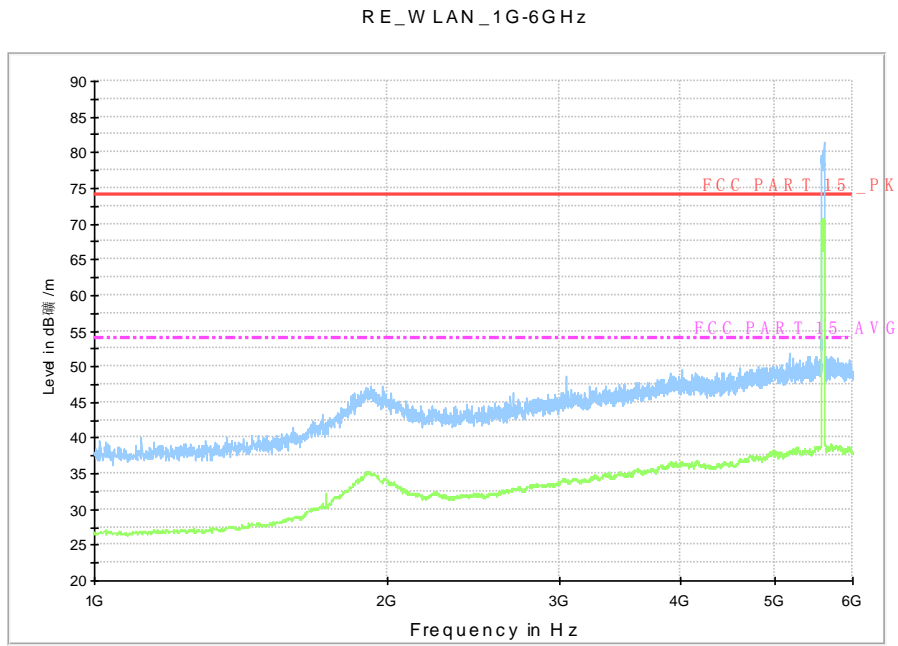


Fig. 126 Radiated Spurious Emission (802.11n-HT40, ch118, 1 GHz-6 GHz)

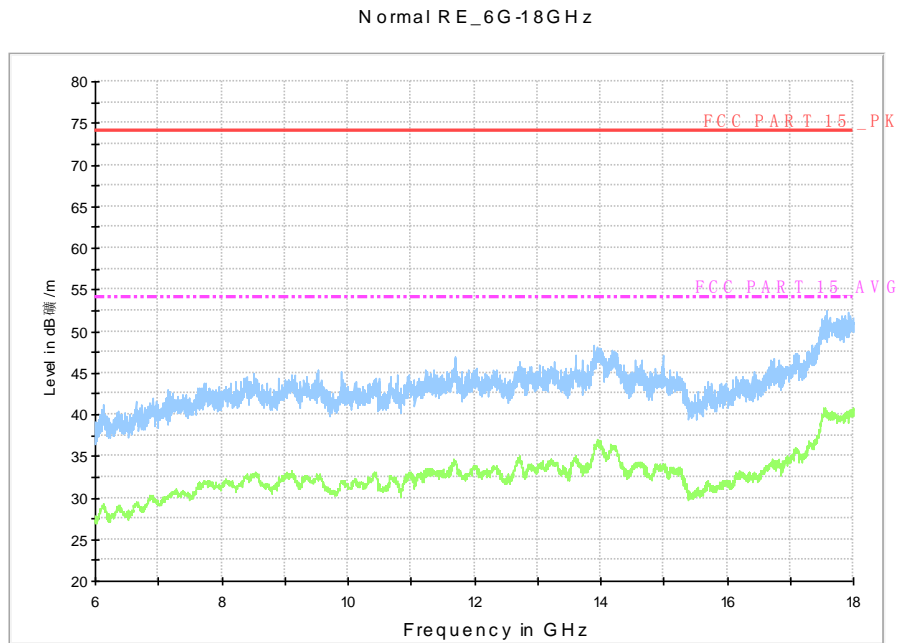


Fig. 127 Radiated Spurious Emission (802.11n-HT40, ch118, 6 GHz-18 GHz)

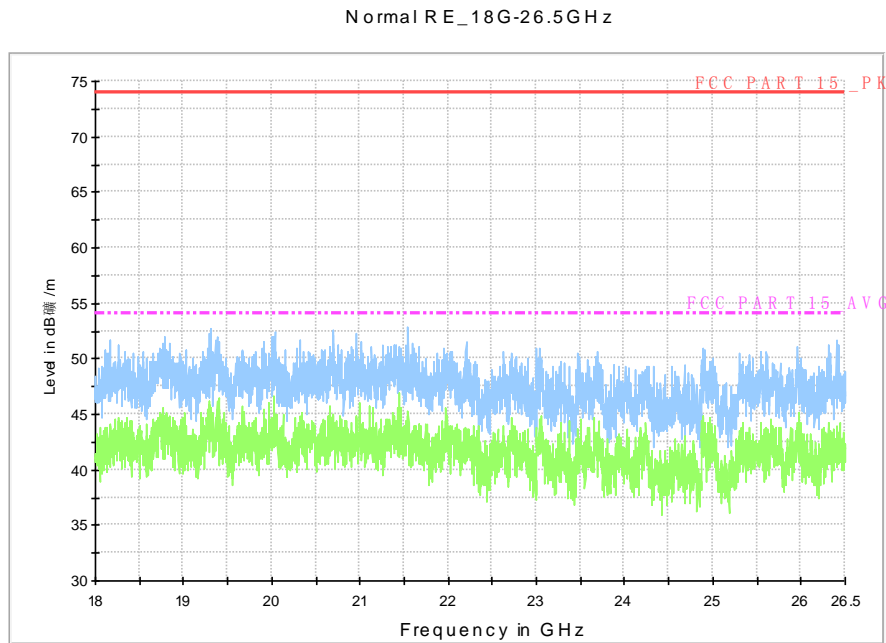


Fig. 128 Radiated Spurious Emission (802.11n-HT40, ch118, 18 GHz-26.5 GHz)

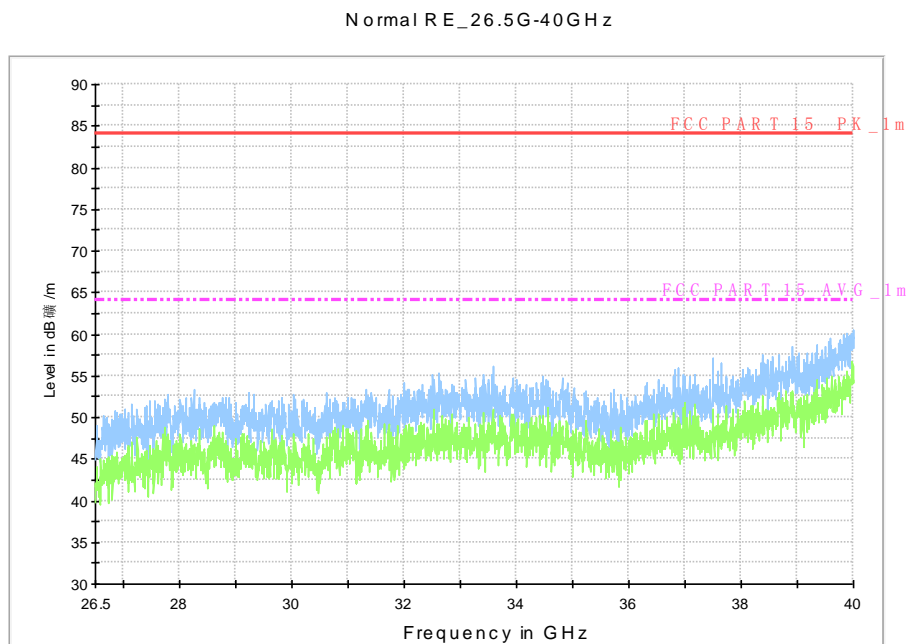


Fig. 129 Radiated Spurious Emission (802.11n-HT40, ch118, 26.5 GHz-40 GHz)

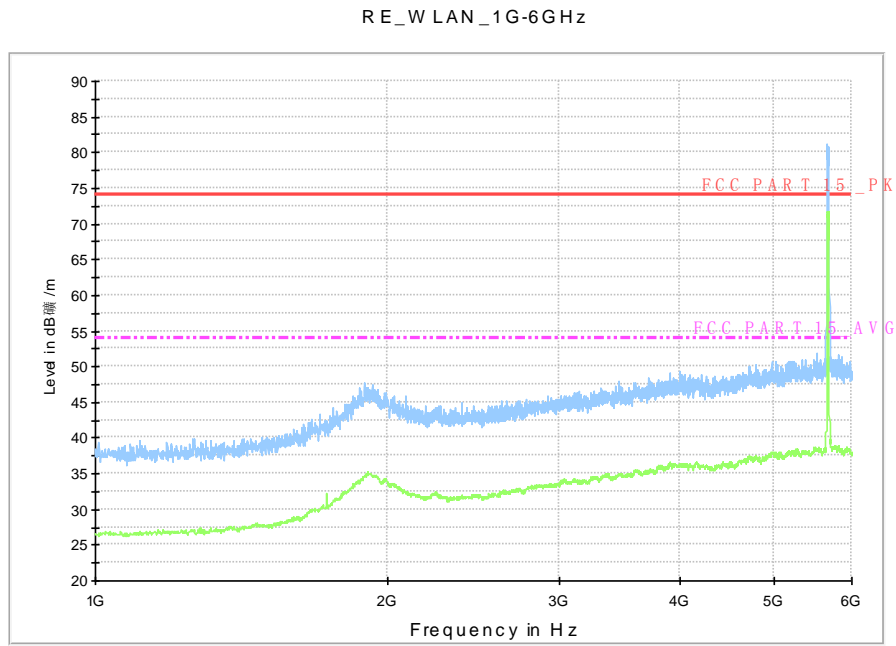


Fig. 130 Radiated Spurious Emission (802.11n-HT40, ch134, 1 GHz-6 GHz)

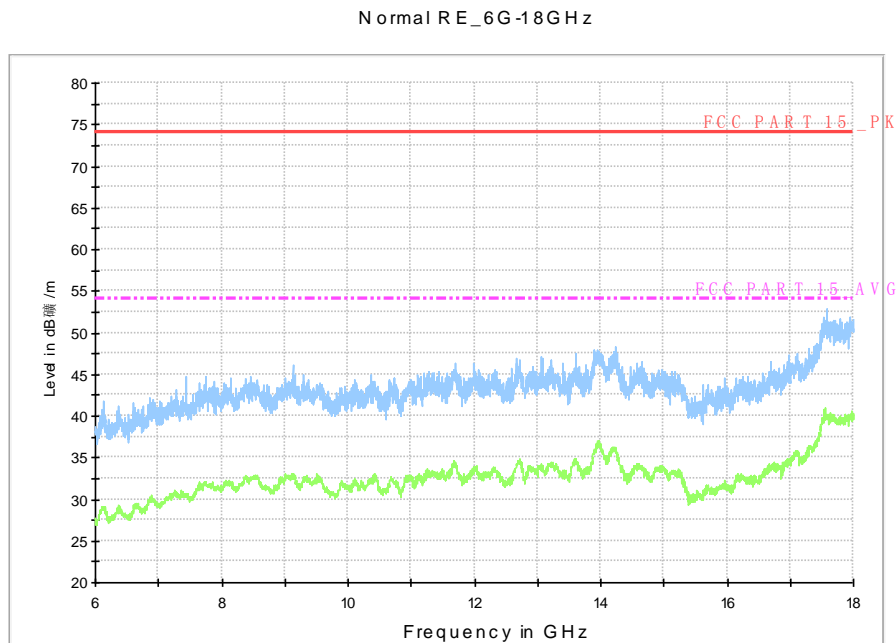


Fig. 131 Radiated Spurious Emission (802.11n-HT40, ch134, 6 GHz-18 GHz)

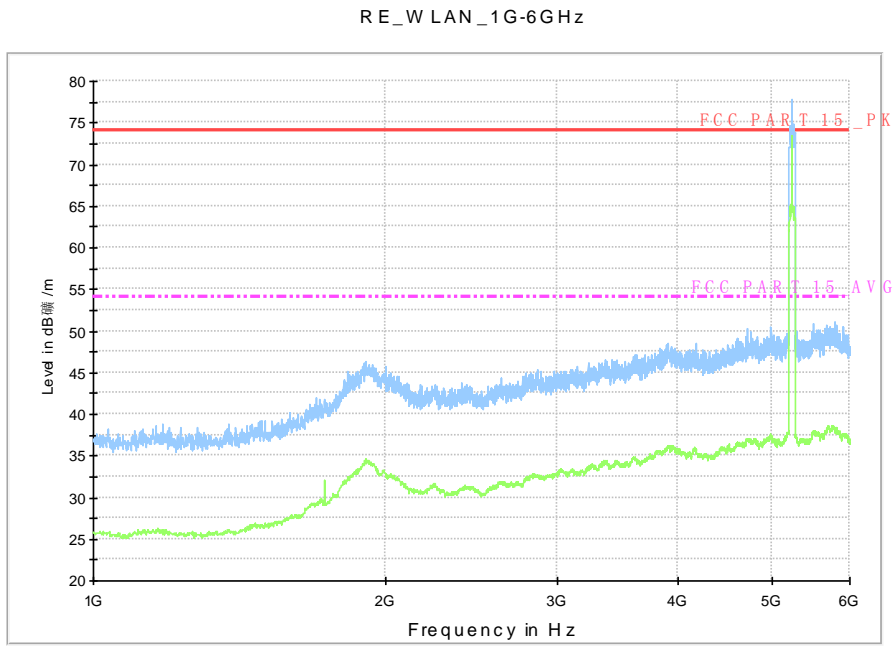


Fig. 132 Radiated Spurious Emission (802.11ac-HT80, ch42, 1 GHz-6 GHz)

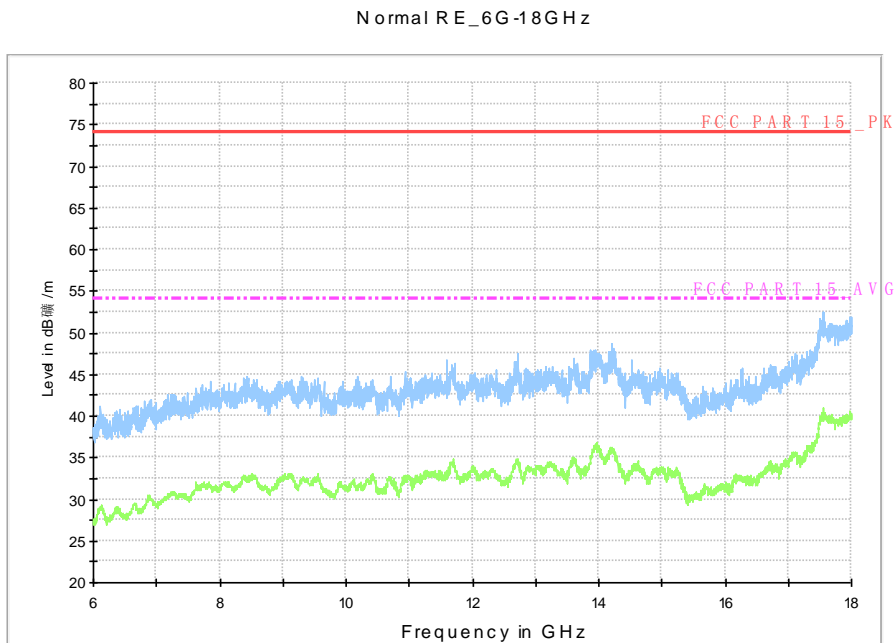


Fig. 133 Radiated Spurious Emission (802.11ac-HT80, ch42, 6 GHz-18 GHz)

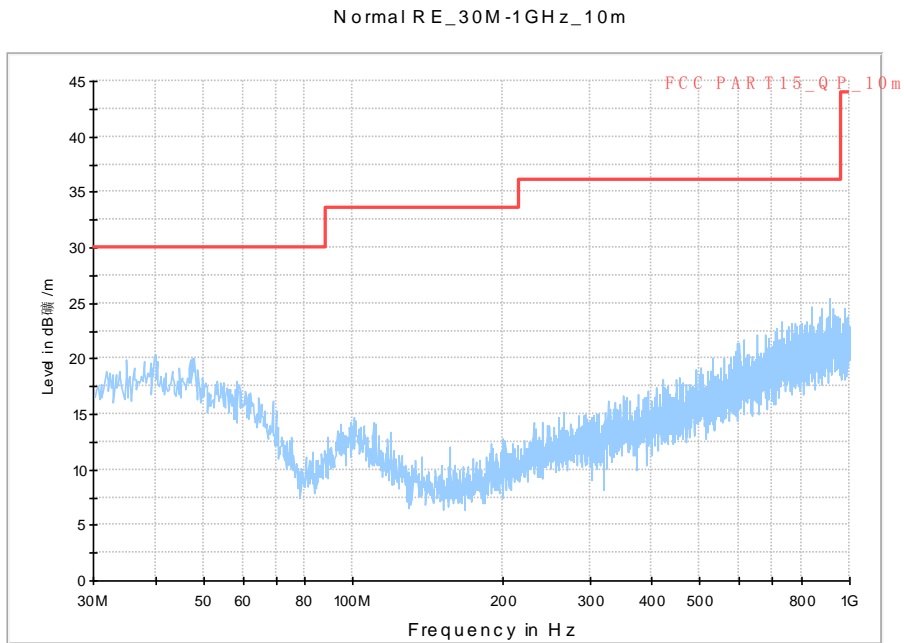


Fig. 134 Radiated Spurious Emission (802.11ac-HT80, ch58, 30 MHz-1 GHz)

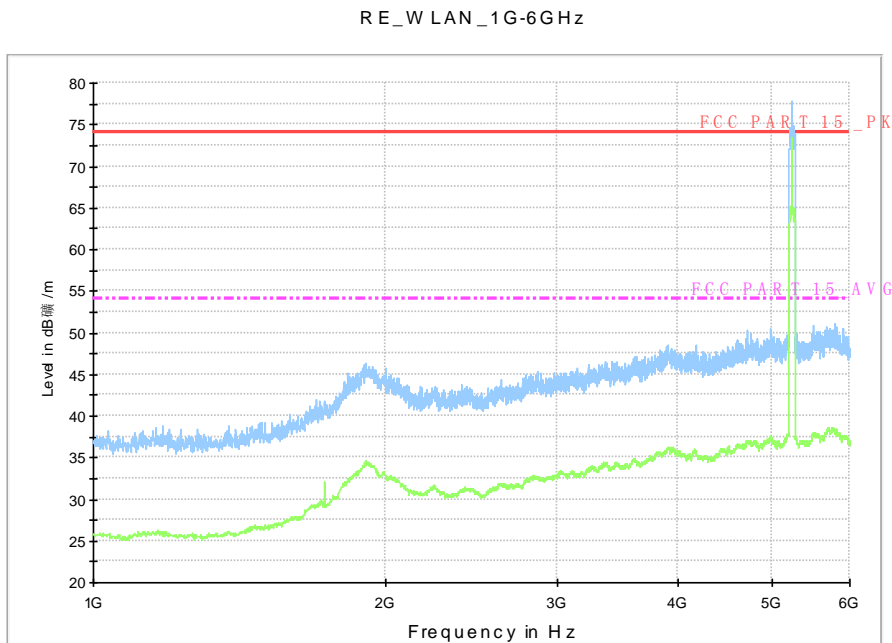


Fig. 135 Radiated Spurious Emission (802.11ac-HT80, ch58, 1 GHz-6 GHz)

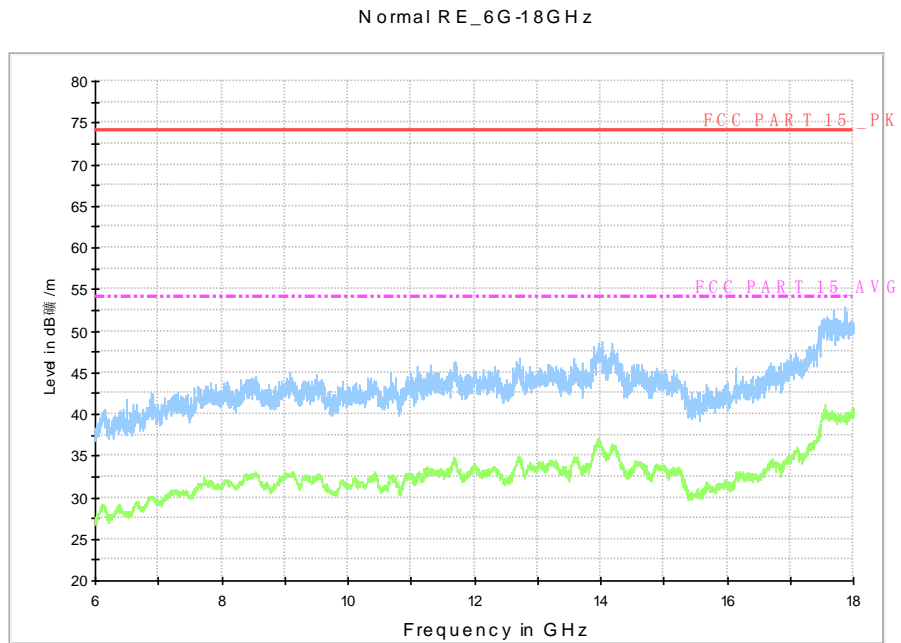


Fig. 136 Radiated Spurious Emission (802.11ac-HT80, ch58, 6 GHz-18 GHz)

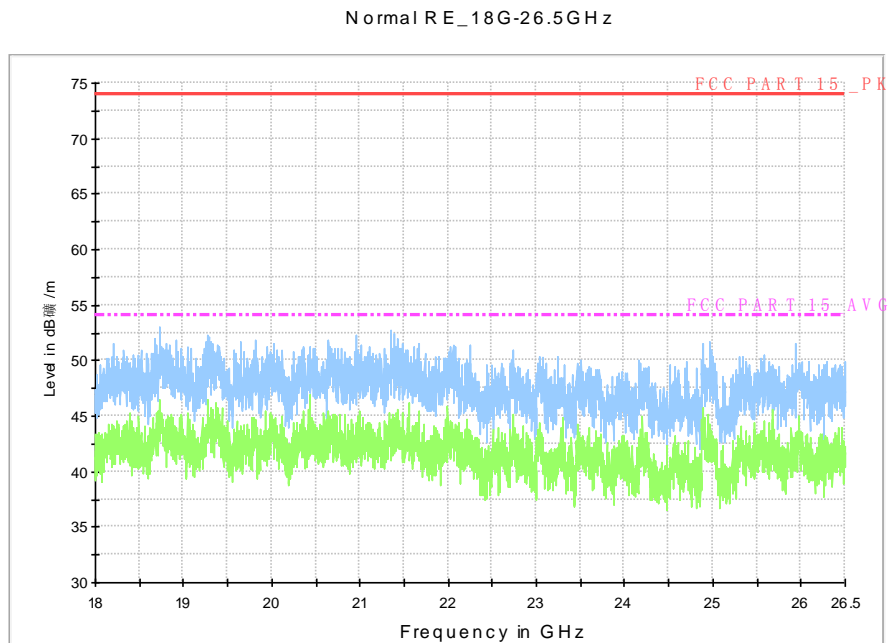


Fig. 137 Radiated Spurious Emission (802.11ac-HT80, ch58, 18 GHz-26.5 GHz)

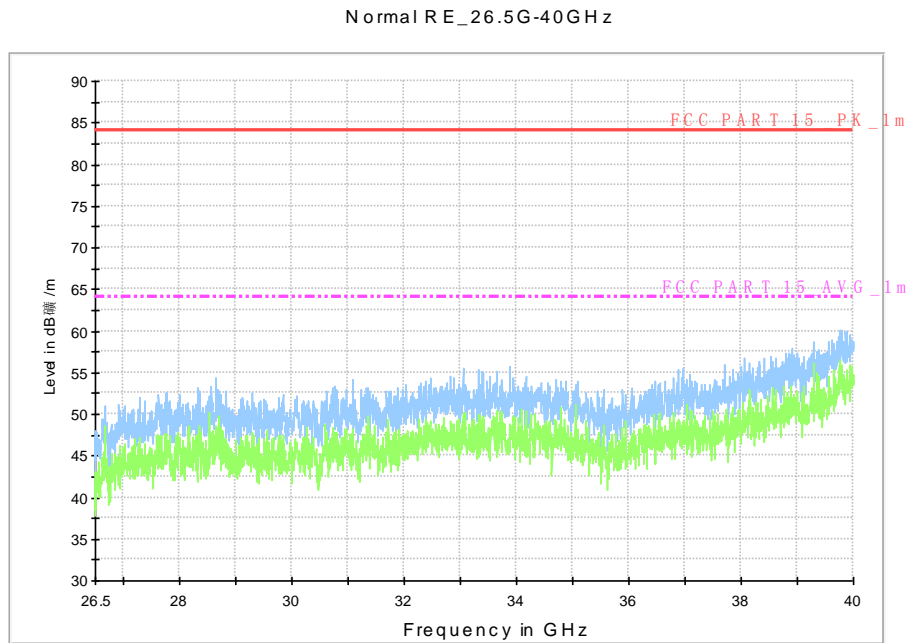


Fig. 138 Radiated Spurious Emission (802.11ac-HT80, ch58, 26.5 GHz-40 GHz)

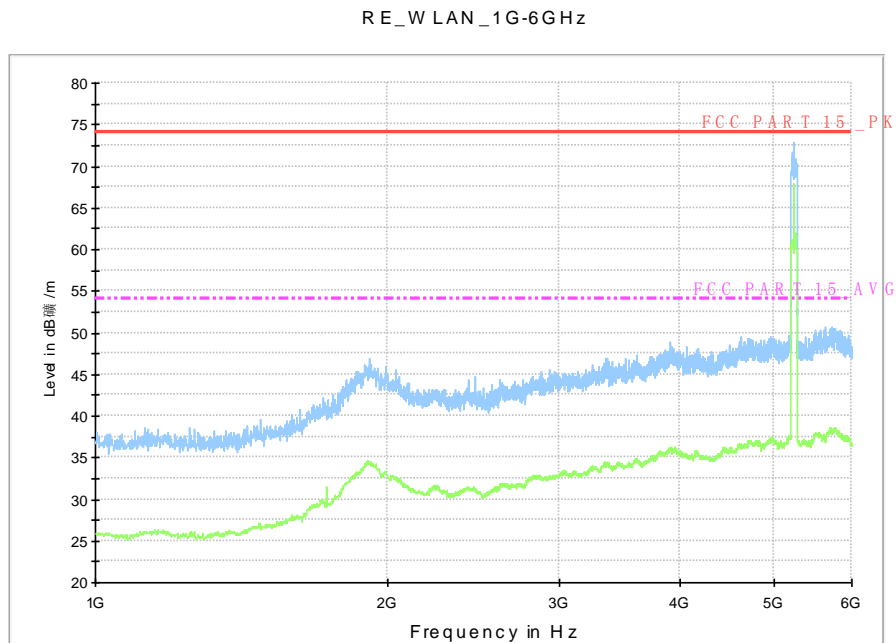


Fig. 139 Radiated Spurious Emission (802.11ac-HT80, ch106, 1 GHz-6 GHz)

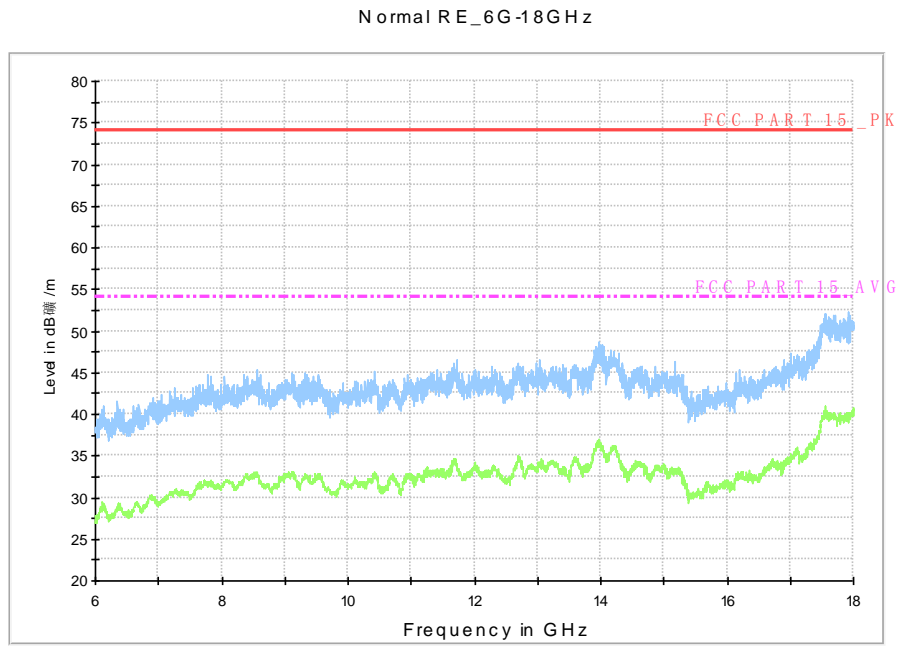


Fig. 140 Radiated Spurious Emission (802.11ac-HT80, ch106, 6 GHz-18 GHz)

A.7. Spurious Emissions Radiated < 30MHz

Measurement Limit(15.209, 9kHz-30MHz):

Frequency (MHz)	Field strength($\mu\text{V}/\text{m}$)	Measurement distance(m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30

The measurement is made according to KDB 789033

Note: The measurement distance during the test is 3m. The limit used in plots is recalculated based on the extrapolation factor of 40 dB/decade.

Measurement uncertainty:

Expanded measurement uncertainty for this test item is $U = 2.6\text{dB}$, $k=2$.

Measurement Results:

Mode	Frequency Range	Test Results	Conclusion
802.11a	9 kHz ~30 MHz	Fig.141	P

Conclusion: PASS

Test graphs as below:

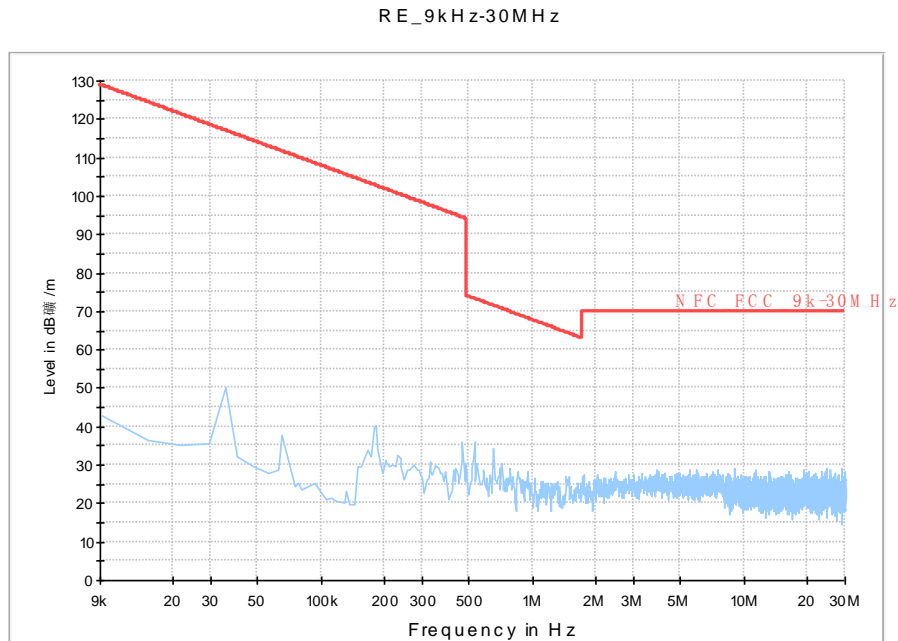


Fig. 141 Radiated Spurious Emission (802.11a, ch40, 9 kHz ~30 MHz)

A.8. Conducted Emission (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 (MHz)	Quasi-peak Limit (dB μ V)	Result (dB μ V)		Conclusion
		With charger		
		11a mode	Idle	
0.15 to 0.5	66 to 56	Fig. 142	Fig. 143	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 (dB μ V)	Result (dB μ V)		Conclusion
		With charger		
		11a mode	Idle	
0.15 to 0.5	56 to 46	Fig.142	Fig.143	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:

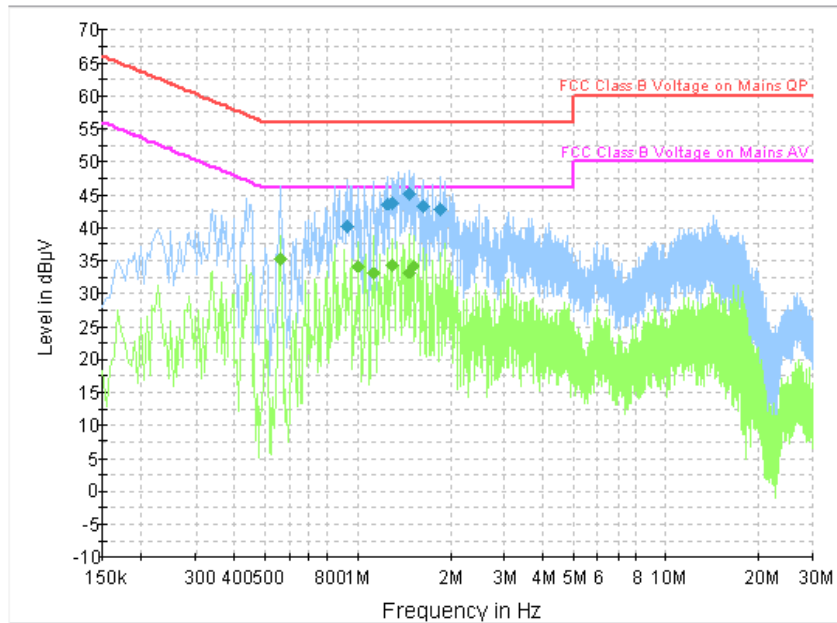


Fig. 142 Conducted Emission(802.11a, Ch40, TX)

Measurement Result:

Frequency (MHz)	QuasiPeak (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.933000	40.2	GND	L1	9.7	15.8	56.0
1.248000	43.6	GND	L1	9.7	12.4	56.0
1.297500	43.7	GND	L1	9.7	12.3	56.0
1.473000	45.1	GND	L1	9.7	10.9	56.0
1.639500	43.2	GND	L1	9.7	12.8	56.0
1.869000	42.9	GND	L1	9.7	13.1	56.0

Measurement Result:

Frequency (MHz)	Average (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.564000	35.4	GND	L1	9.8	10.6	46.0
1.014000	34.2	GND	L1	9.7	11.8	46.0
1.131000	32.9	GND	L1	9.7	13.1	46.0
1.297500	34.3	GND	L1	9.7	11.7	46.0
1.473000	33.3	GND	L1	9.7	12.7	46.0
1.522500	34.1	GND	L1	9.7	11.9	46.0

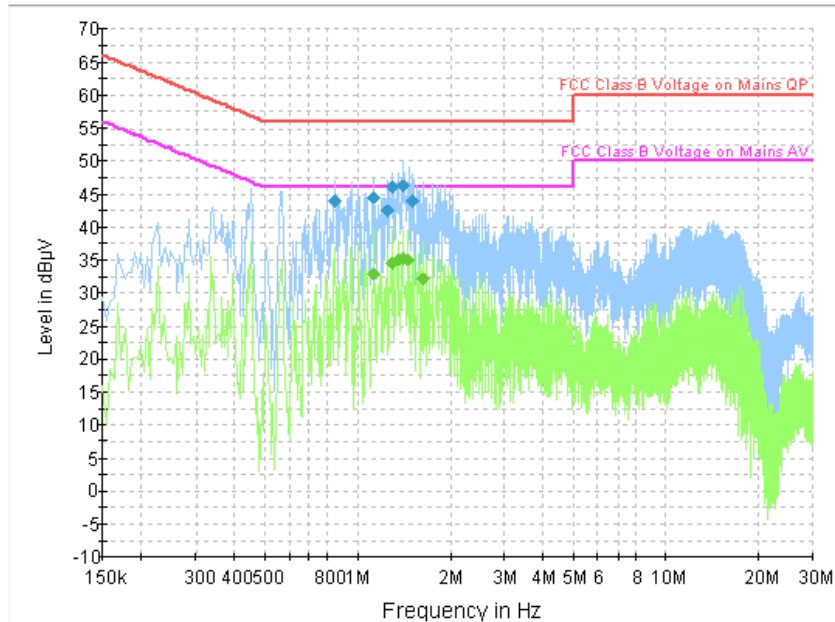


Fig. 143 Conducted Emission(802.11a, IDLE)

Measurement Result:

Frequency (MHz)	QuasiPeak (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.847500	43.9	GND	L1	9.8	12.1	56.0
1.131000	44.5	GND	L1	9.7	11.5	56.0
1.248000	42.5	GND	L1	9.7	13.5	56.0
1.297500	46.0	GND	L1	9.7	10.0	56.0
1.410000	46.2	GND	L1	9.7	9.8	56.0
1.509000	44.0	GND	L1	9.7	12.0	56.0

Measurement Result:

Frequency (MHz)	Average (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
1.131000	32.7	GND	L1	9.7	13.3	46.0
1.297500	34.5	GND	L1	9.7	11.5	46.0
1.356000	35.0	GND	L1	9.7	11.0	46.0
1.410000	35.4	GND	L1	9.7	10.6	46.0
1.459500	35.0	GND	L1	9.7	11.0	46.0
1.639500	32.2	GND	L1	9.7	13.8	46.0

A.9. Peak Excursion

Measurement Limit:

Standard	Limit (dB)
FCC 47 CFR Part 15.407	13

The measurement is made according to KDB 789033, the method SA-1 is used for PPST measurement.

Measurement Uncertainty:

Measurement Uncertainty	0.75 dB
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Measurement Result:

11a mode

Type	Peak Excursion					
	5180MHz (Ch36)		5200MHz (Ch40)		5240MHz (Ch48)	
Peak (dBm)	Fig.144	9.39	Fig.145	9.31	Fig.146	9.18
Average(dBm)	Fig.147	0.61	Fig.148	0.69	Fig.149	0.74
Result (dB)	8.78		8.62		8.44	

Type	Test Result (dBm)					
	5260MHz (Ch52)		5280 MHz (Ch56)		5320 MHz (Ch64)	
Peak (dBm)	Fig.150	10.00	Fig.151	10.07	Fig.152	9.45
Average(dBm)	Fig.153	1.72	Fig.154	1.50	Fig.155	0.91
Result (dB)	8.28		8.57		8.54	

Type	Test Result (dBm)					
	5500MHz (Ch100)		5600MHz (Ch120)		5700MHz (Ch140)	
Peak (dBm)	Fig.156	9.64	Fig.157	10.67	Fig.158	9.43
Average(dBm)	Fig.159	1.01	Fig.160	1.99	Fig.161	0.96
Result (dB)	8.63		8.68		8.47	

11n-HT20 mode

Type	Peak Excursion					
	5180MHz (Ch36)		5200MHz (Ch40)		5240MHz (Ch48)	
Peak (dBm)	Fig.162	9.27	Fig.163	9.70	Fig.164	9.40
Average(dBm)	Fig.165	1.04	Fig.166	0.54	Fig.167	0.83
Result (dB)	8.23		9.16		8.57	

Type	Test Result (dBm)					
	5260MHz (Ch52)		5280 MHz (Ch56)		5320 MHz (Ch64)	
Peak (dBm)	Fig.168	11.08	Fig.169	9.45	Fig.170	9.57
Average(dBm)	Fig.171	1.72	Fig.172	1.22	Fig.173	0.89
Result (dB)	9.36		8.23		8.68	

Type	Test Result (dBm)					
	5500MHz (Ch100)		5600MHz (Ch120)		5700MHz (Ch140)	
Peak (dBm)	Fig.174	9.59	Fig.175	11.09	Fig.176	9.56
Average(dBm)	Fig.177	1.06	Fig.178	2.14	Fig.179	1.20
Result (dB)	8.53		8.95		8.36	

11n-HT40 mode

Type	Peak Excursion							
	5190MHz (Ch38)		5230MHz (Ch46)		5270MHz (Ch54)		5310 MHz (Ch62)	
Peak (dBm)	Fig.180	2.26	Fig.181	1.92	Fig.182	3.49	Fig.183	3.61
Average(dBm)	Fig.184	-6.29	Fig.185	-5.80	Fig.186	-5.20	Fig.187	-5.78
Result (dB)	8.55		7.72		8.69		9.39	

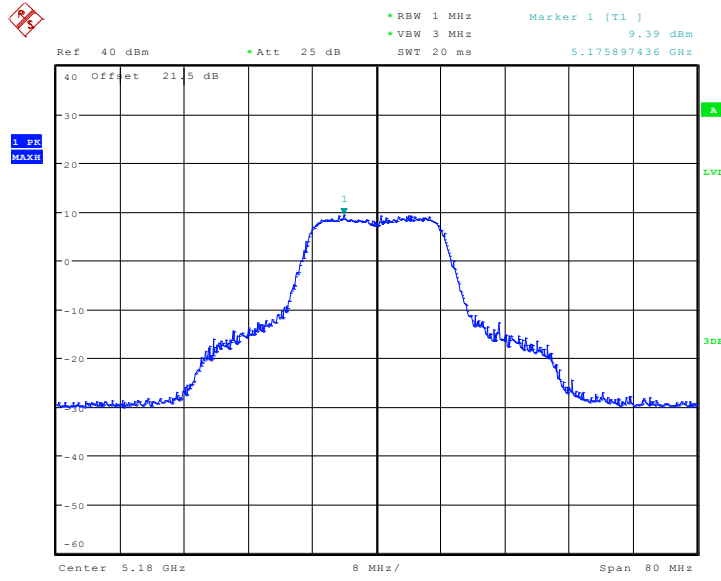
Type	Test Result (dBm)					
	5510MHz (Ch102)		5590MHz (Ch118)		5670MHz (Ch134)	
Peak (dBm)	Fig.188	2.65	Fig.189	3.63	Fig.190	2.64
Average(dBm)	Fig.191	-5.44	Fig.192	-4.74	Fig.193	-4.99
Result (dB)	8.09		8.37		7.63	

11ac-HT80 mode

Type	Test Result (dBm)					
	5210MHz (Ch42)		5290MHz (Ch58)		5530MHz (Ch106)	
Peak (dBm)	Fig.194	-2.60	Fig.195	-0.47	Fig.196	-2.81
Average(dBm)	Fig.197	-10.71	Fig.198	-8.88	Fig.199	-10.36
Result (dB)	8.11		8.41		7.55	

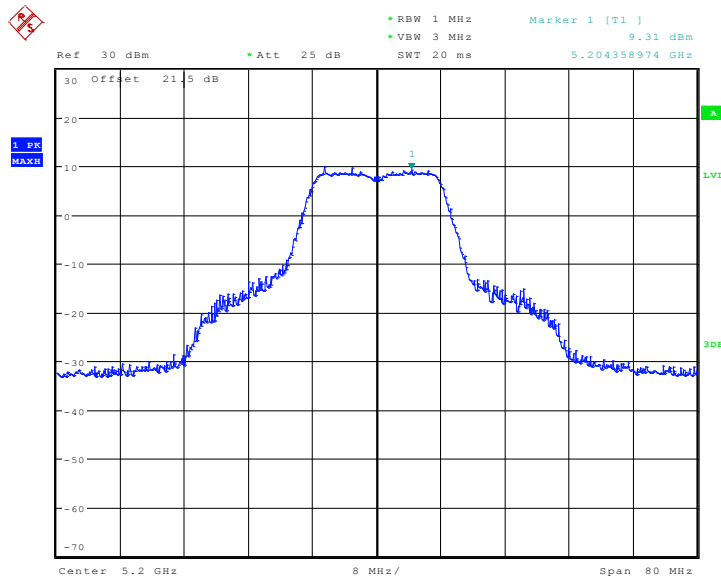
Conclusion: PASS

Test graphs as below:



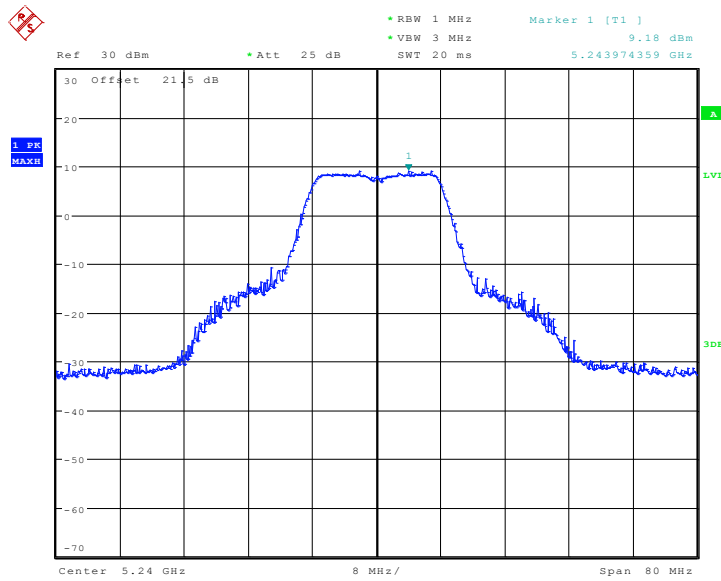
Date: 27.SEP.2013 17:28:34

Fig. 144 Peak Excursions (802.11a, ch36, peak)



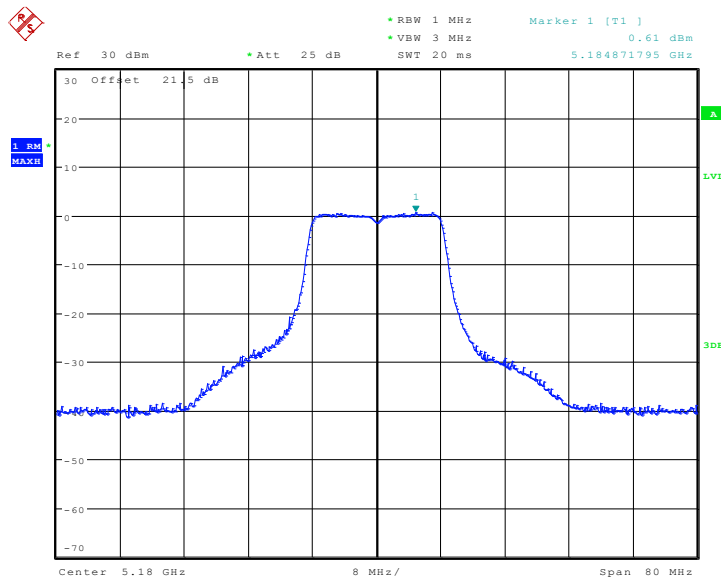
Date: 27.SEP.2013 17:32:05

Fig. 145 Peak Excursions (802.11a, ch40, peak)



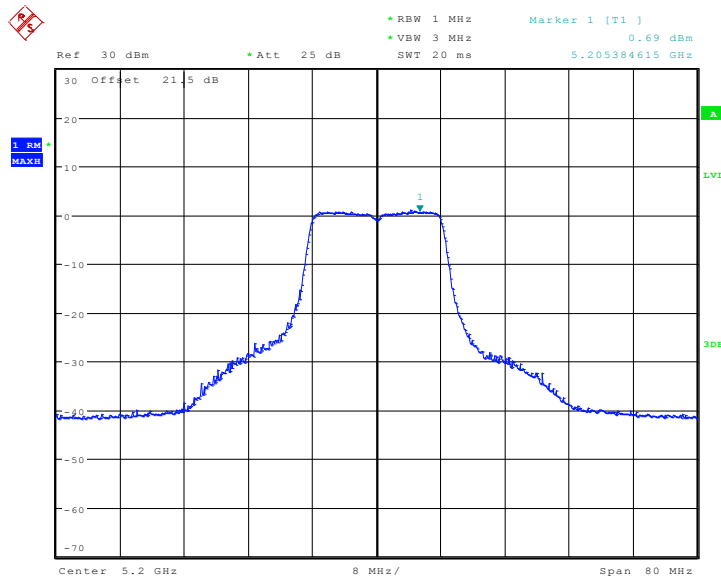
Date: 27.SEP.2013 17:32:58

Fig. 146 Peak Excursions (802.11a, ch48, peak)



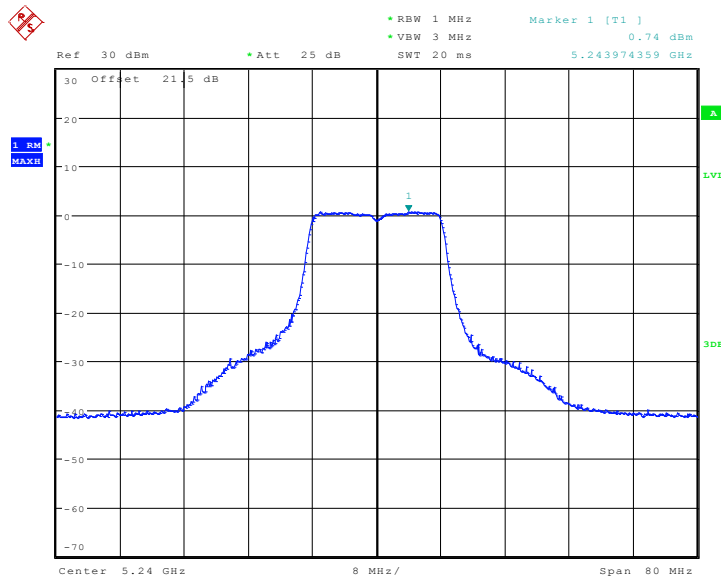
Date: 27.SEP.2013 17:28:55

Fig. 147 Peak Excursions (802.11a, ch36, average)



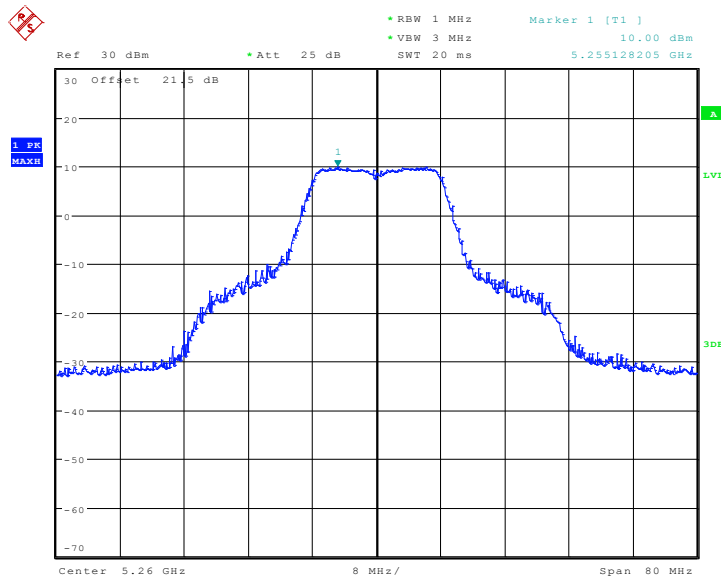
Date: 27.SEP.2013 17:32:18

Fig. 148 Peak Excursions (802.11a, ch40, average)



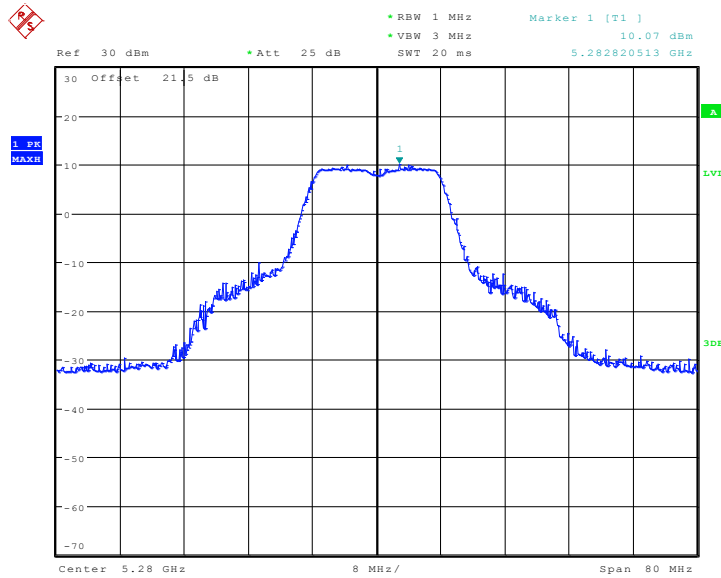
Date: 27.SEP.2013 17:33:18

Fig. 149 Peak Excursions (802.11a, ch48, average)



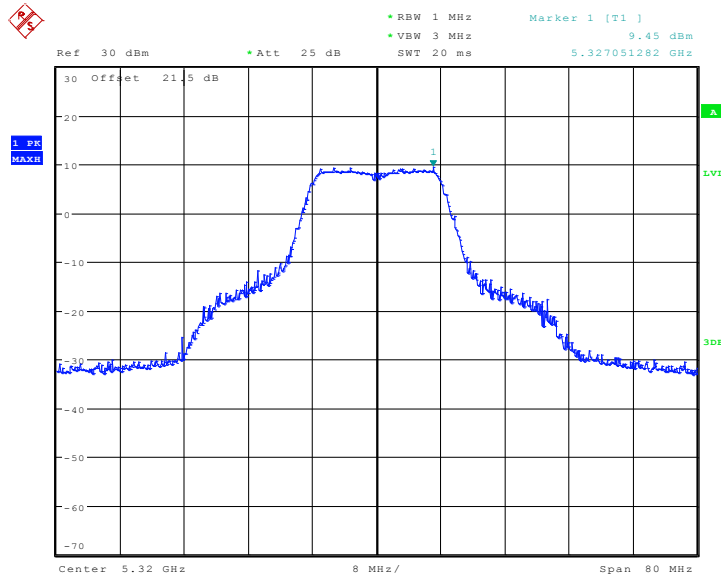
Date: 27.SEP.2013 17:45:06

Fig. 150 Peak Excursions (802.11a, ch52, peak)



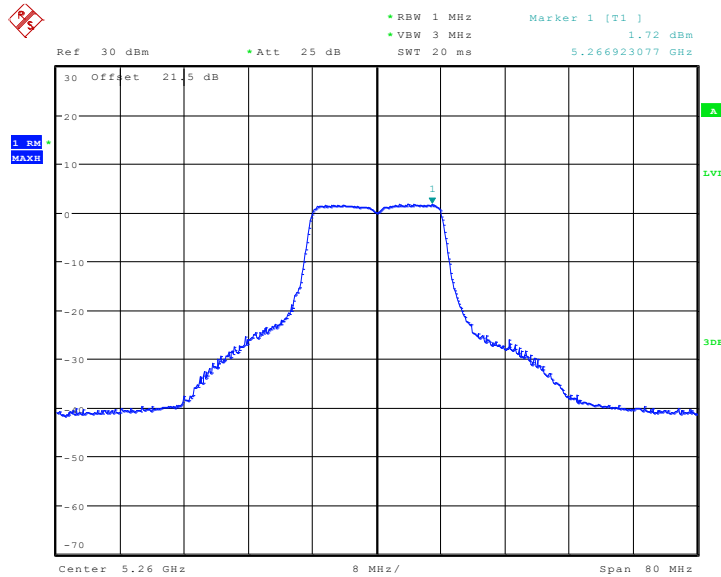
Date: 27.SEP.2013 17:46:00

Fig. 151 Peak Excursions (802.11a, ch56, peak)



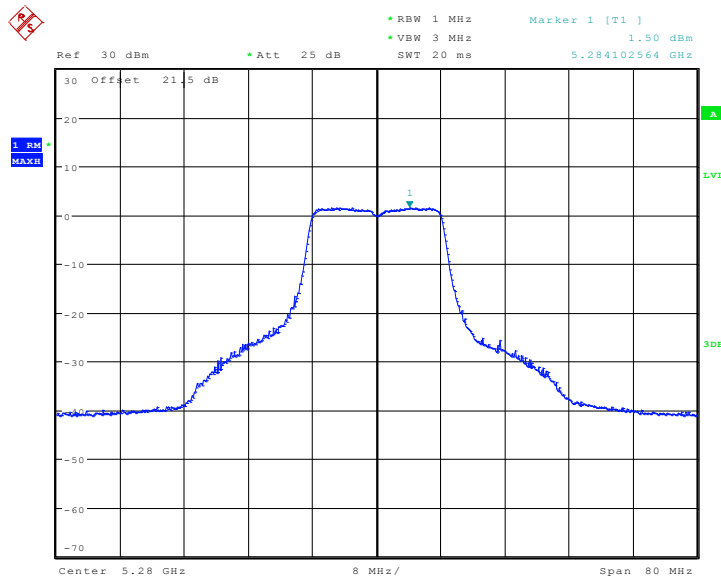
Date: 27.SEP.2013 17:47:58

Fig. 152 Peak Excursions (802.11a, ch64, peak)



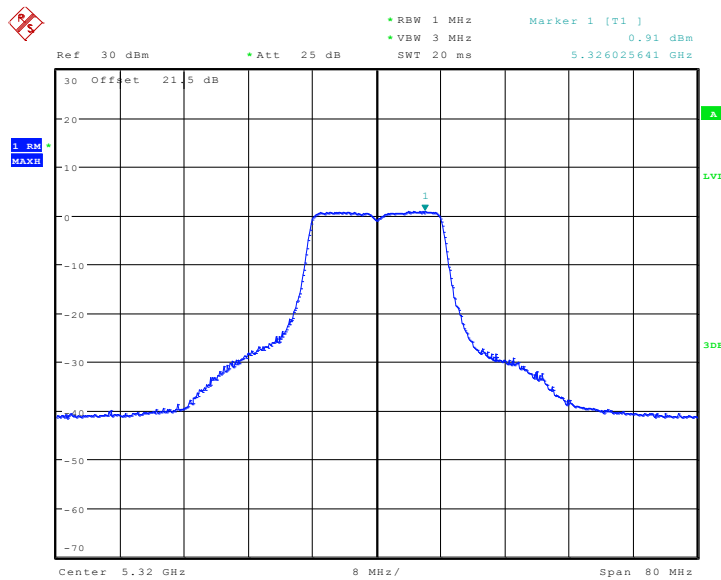
Date: 27.SEP.2013 17:45:20

Fig. 153 Peak Excursions (802.11a, ch52, average)



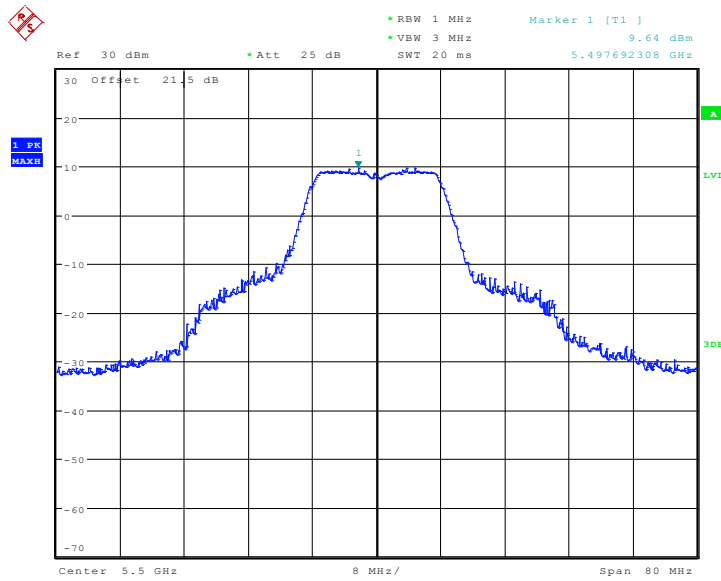
Date: 27.SEP.2013 17:47:12

Fig. 154 Peak Excursions (802.11a, ch56, average)



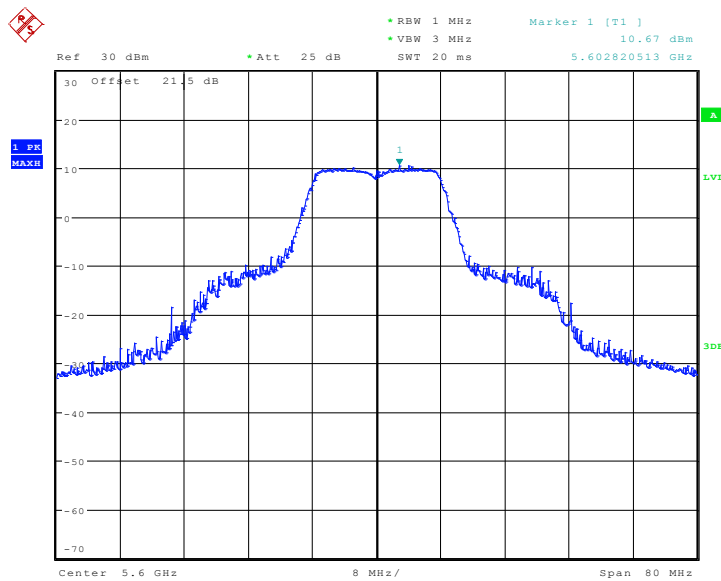
Date: 27.SEP.2013 17:48:17

Fig. 155 Peak Excursions (802.11a, ch64, average)



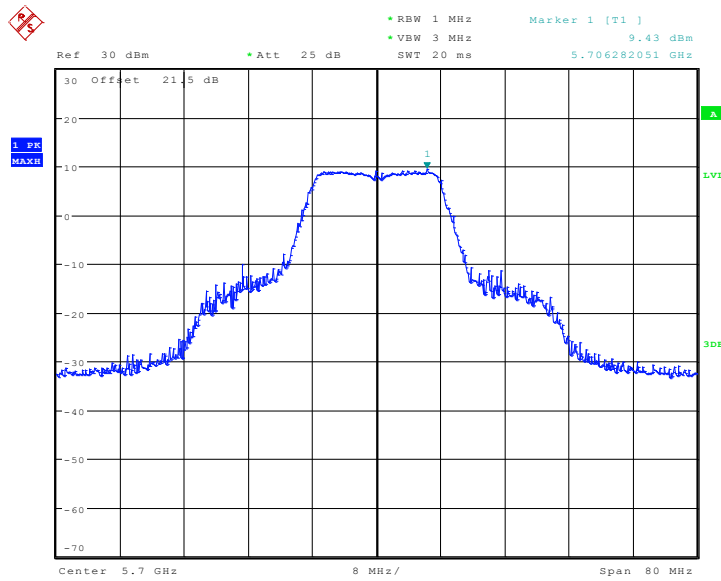
Date: 27.SEP.2013 18:27:28

Fig. 156 Peak Excursions (802.11a, ch100, peak)



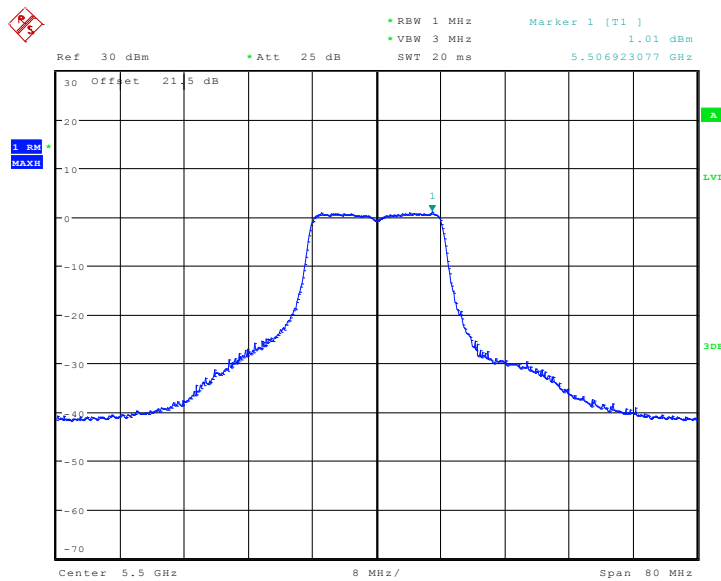
Date: 27.SEP.2013 18:28:38

Fig. 157 Peak Excursions (802.11a, ch120, peak)



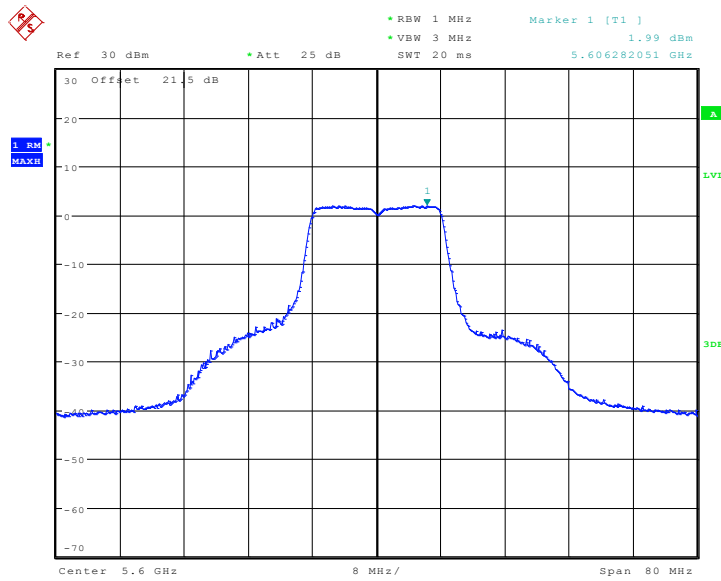
Date: 27.SEP.2013 18:29:43

Fig. 158 Peak Excursions (802.11a, ch140, peak)



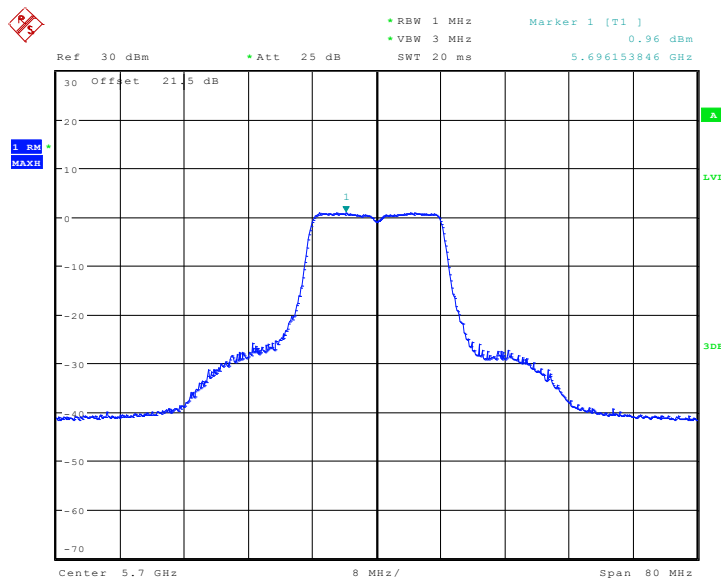
Date: 27.SEP.2013 18:27:46

Fig. 159 Peak Excursions (802.11a, ch100, average)



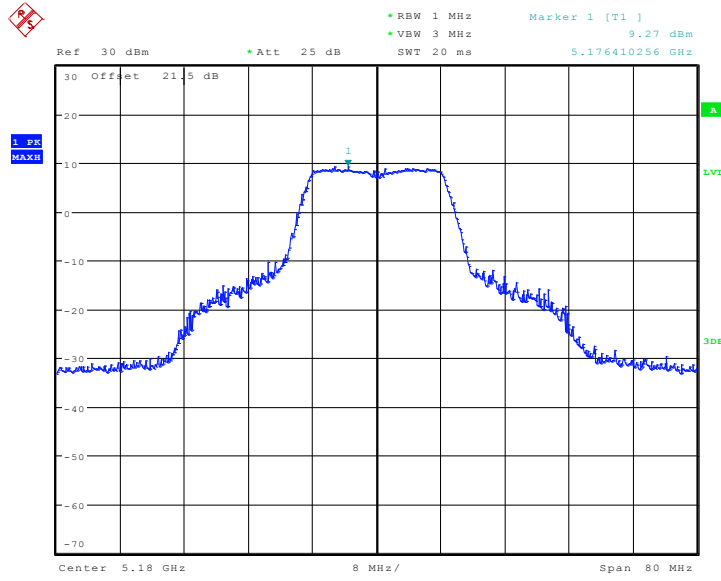
Date: 27.SEP.2013 18:29:08

Fig. 160 Peak Excursions (802.11a, ch120, average)



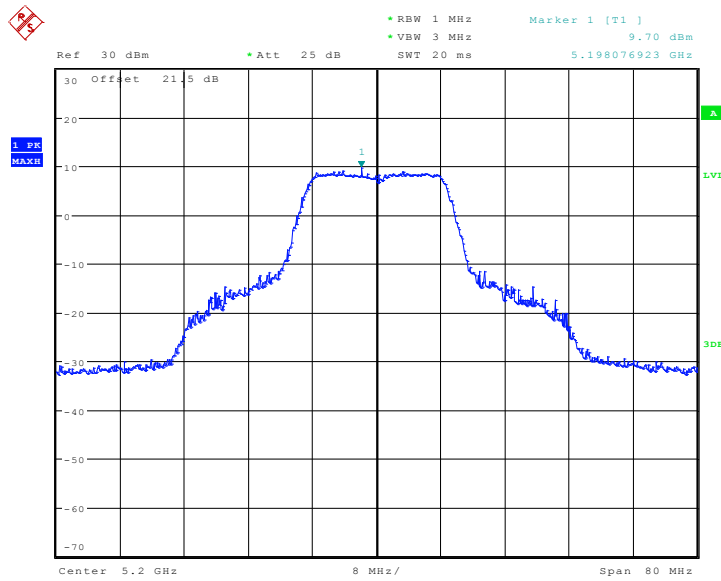
Date: 27.SEP.2013 18:30:00

Fig. 161 Peak Excursions (802.11a, ch140, average)



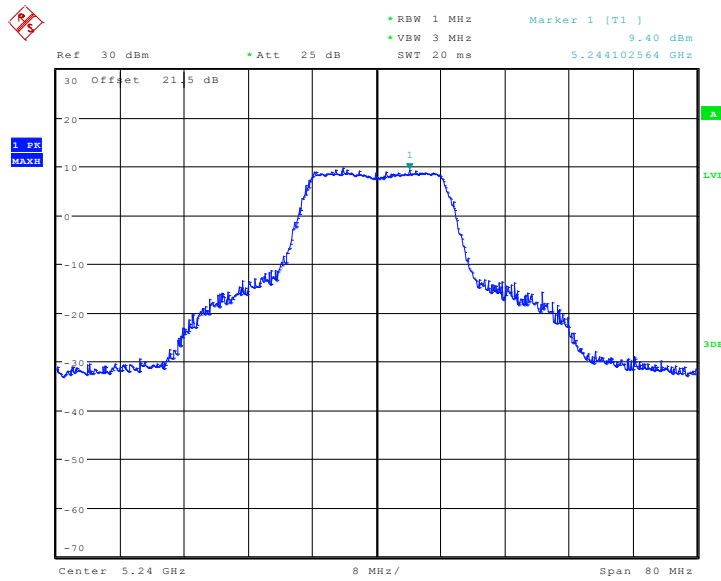
Date: 27.SEP.2013 18:30:39

Fig. 162 Peak Excursions (802.11n-HT20, ch36, peak)



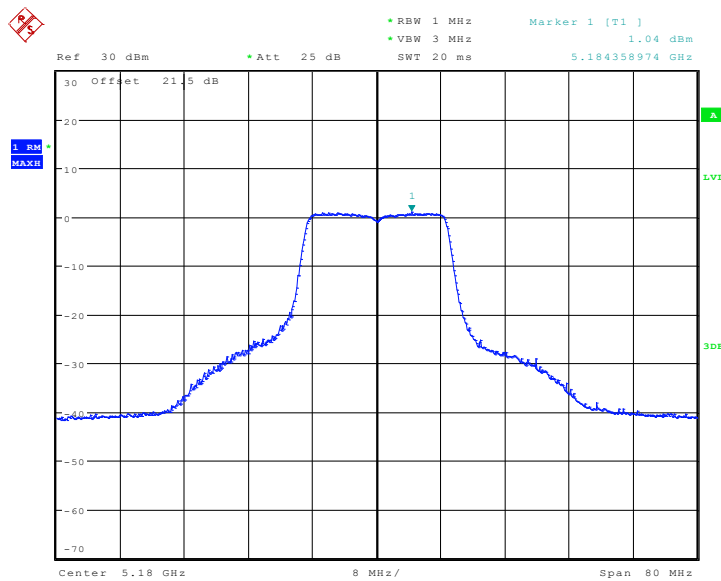
Date: 27.SEP.2013 18:32:20

Fig. 163 Peak Excursions (802.11n-HT20, ch40, peak)



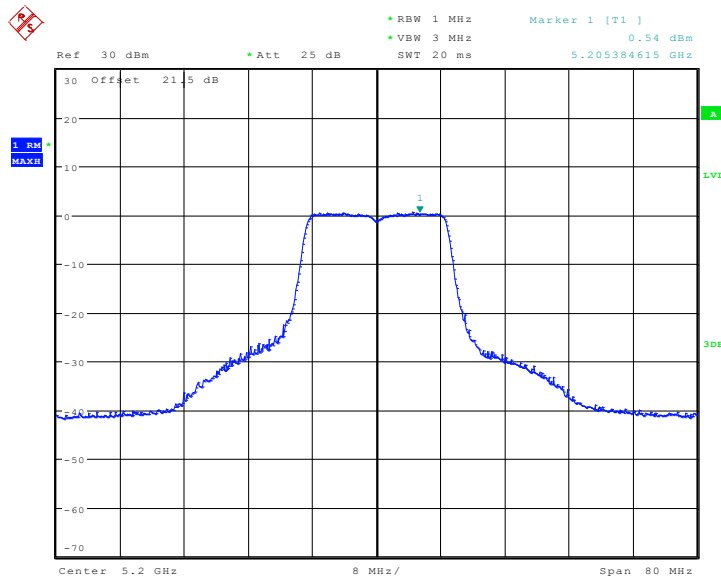
Date: 27.SEP.2013 18:33:29

Fig. 164 Peak Excursions (802.11n-HT20, ch48, peak)



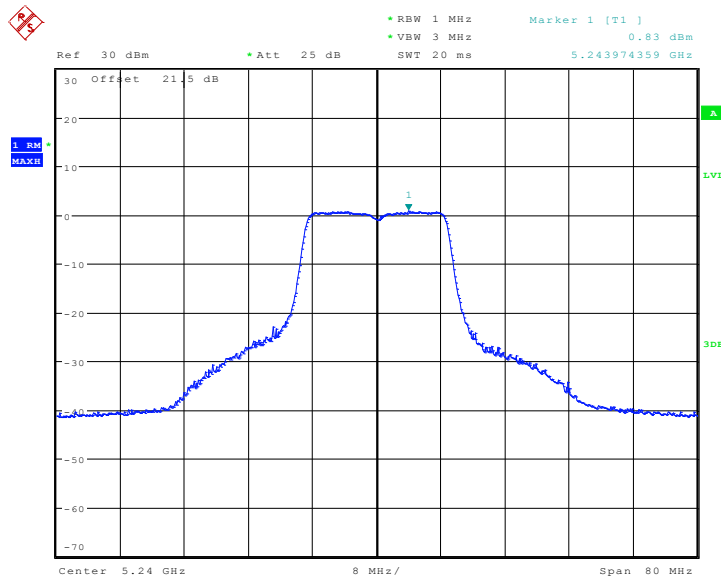
Date: 27.SEP.2013 18:31:07

Fig. 165 Peak Excursions (802.11n-HT20, ch36, average)



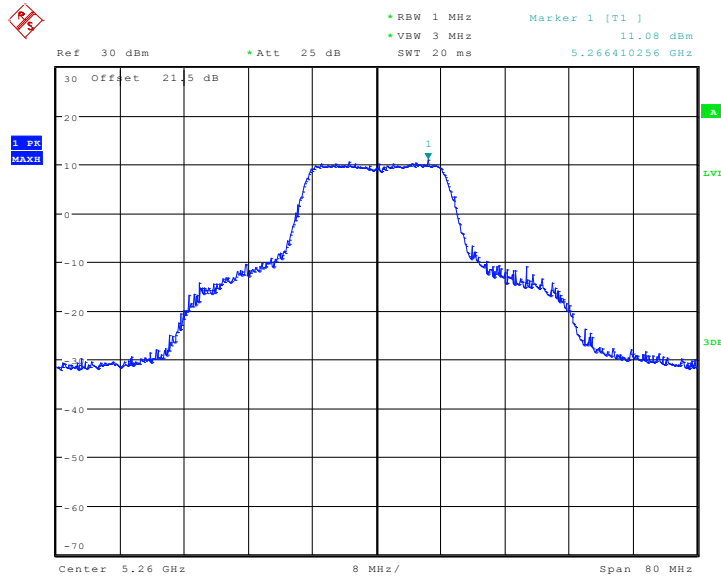
Date: 27.SEP.2013 18:32:41

Fig. 166 Peak Excursions (802.11n-HT20, ch40, average)



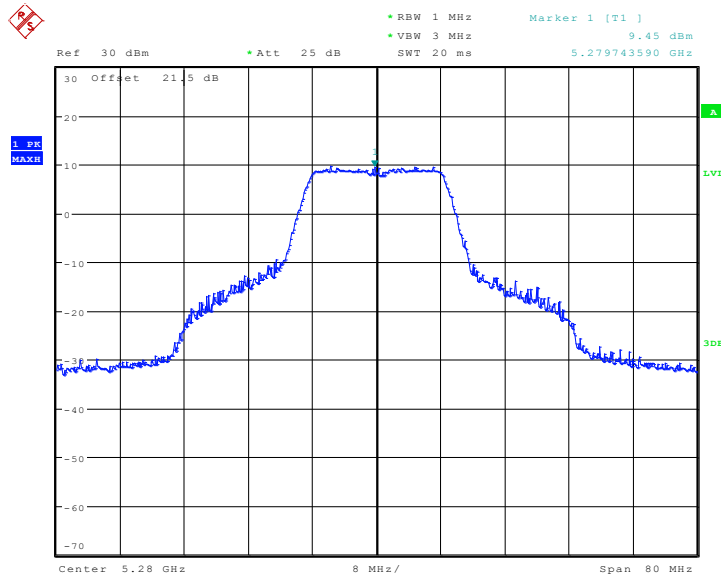
Date: 27.SEP.2013 18:33:53

Fig. 167 Peak Excursions (802.11n-HT20, ch48, average)



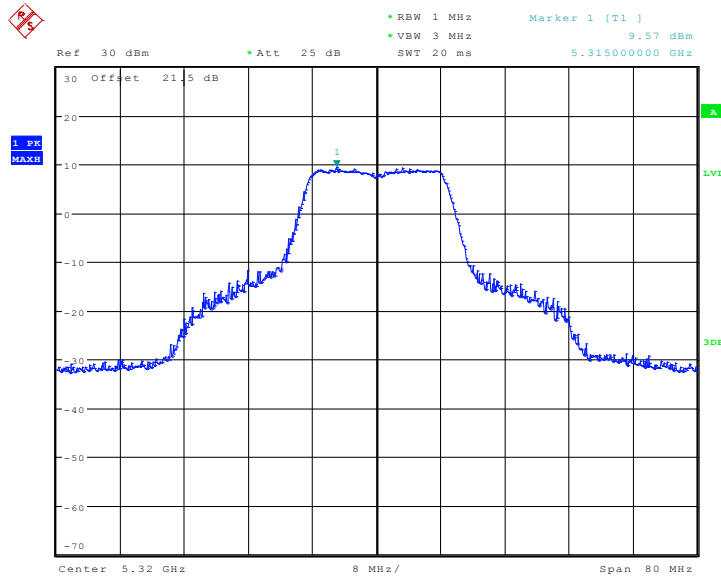
Date: 27.SEP.2013 18:35:27

Fig. 168 Peak Excursions (802.11n-HT20, ch52, peak)



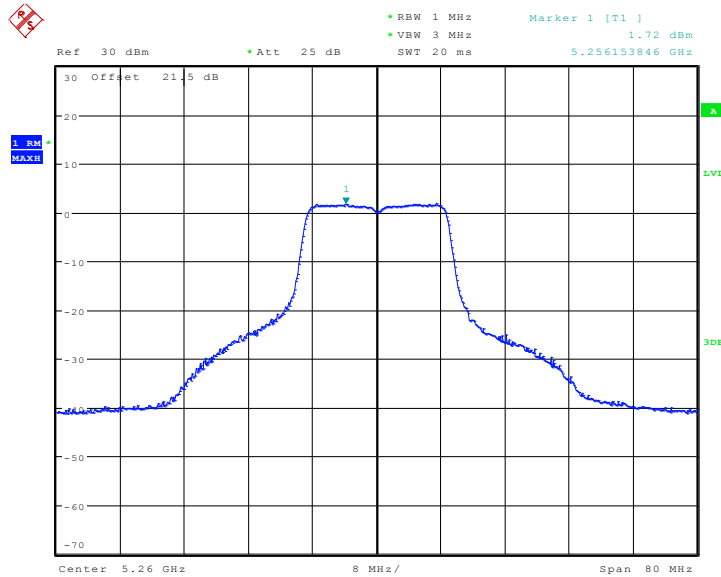
Date: 27.SEP.2013 18:37:05

Fig. 169 Peak Excursions (802.11n-HT20, ch56, peak)



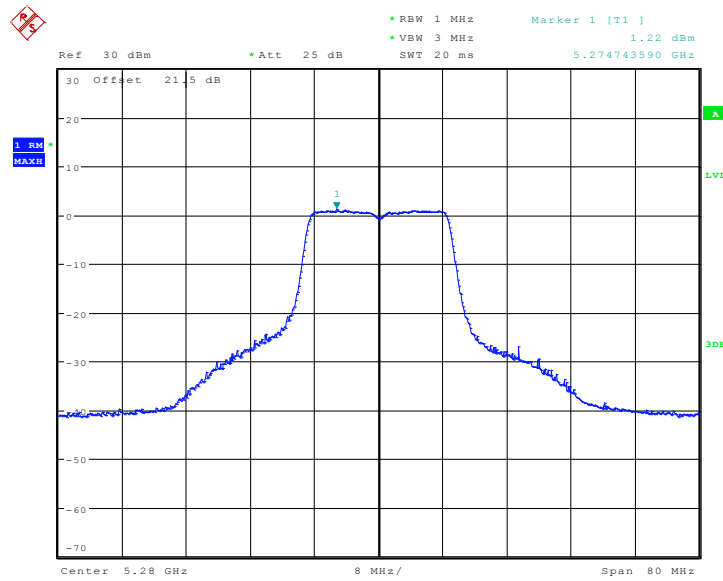
Date: 27.SEP.2013 18:38:20

Fig. 170 Peak Excursions (802.11n-HT20, ch64, peak)



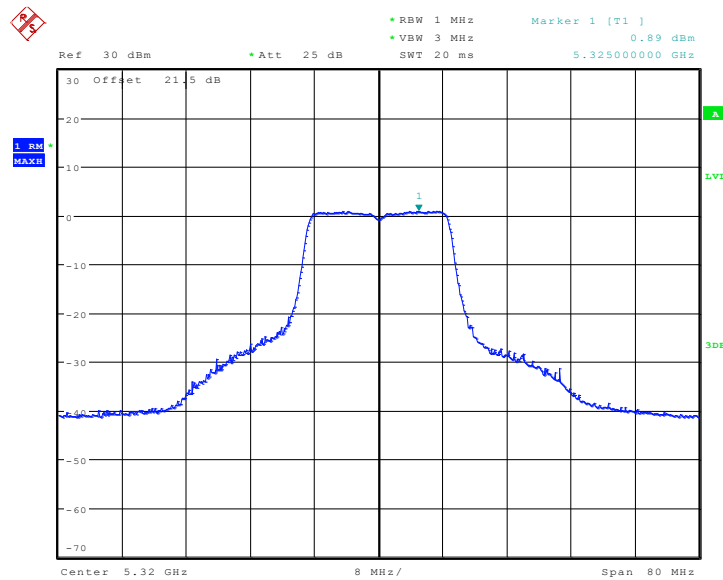
Date: 27.SEP.2013 18:35:46

Fig. 171 Peak Excursions (802.11n-HT20, ch52, average)



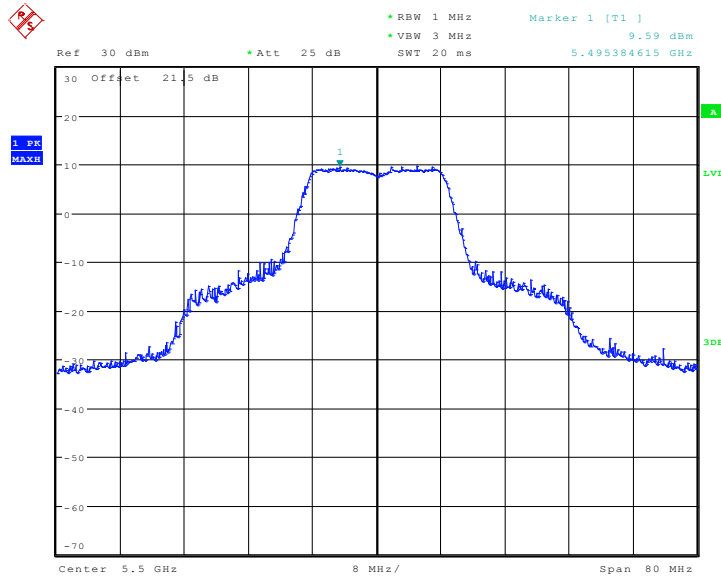
Date: 27.SEP.2013 18:37:25

Fig. 172 Peak Excursions (802.11n-HT20, ch56, average)



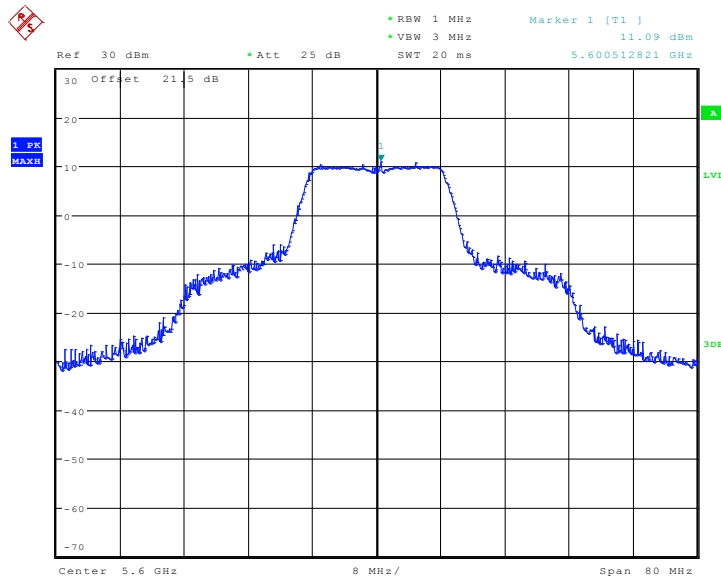
Date: 27.SEP.2013 18:38:35

Fig. 173 Peak Excursions (802.11n-HT20, ch64, average)



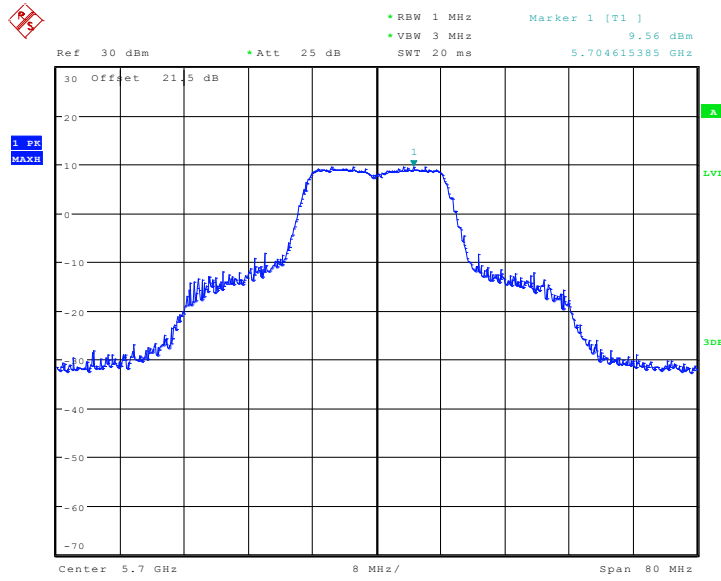
Date: 27.SEP.2013 18:39:17

Fig. 174 Peak Excursions (802.11n-HT20, ch100, peak)



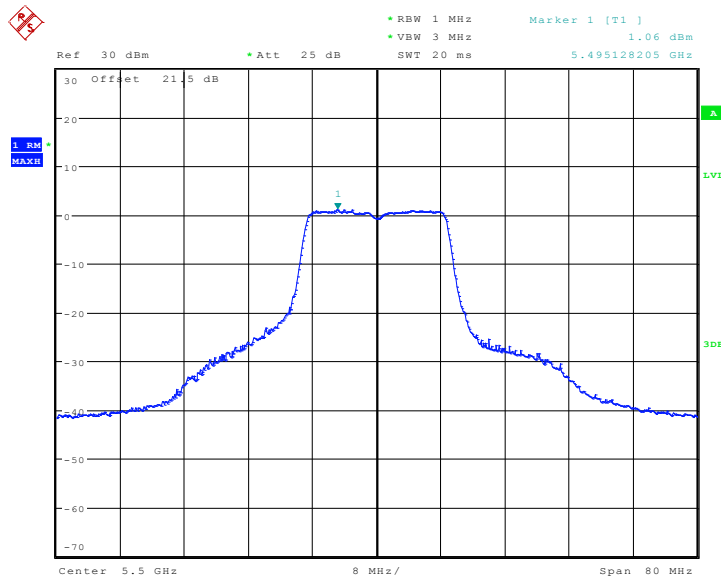
Date: 27.SEP.2013 18:40:22

Fig. 175 Peak Excursions (802.11n-HT20, ch120, peak)



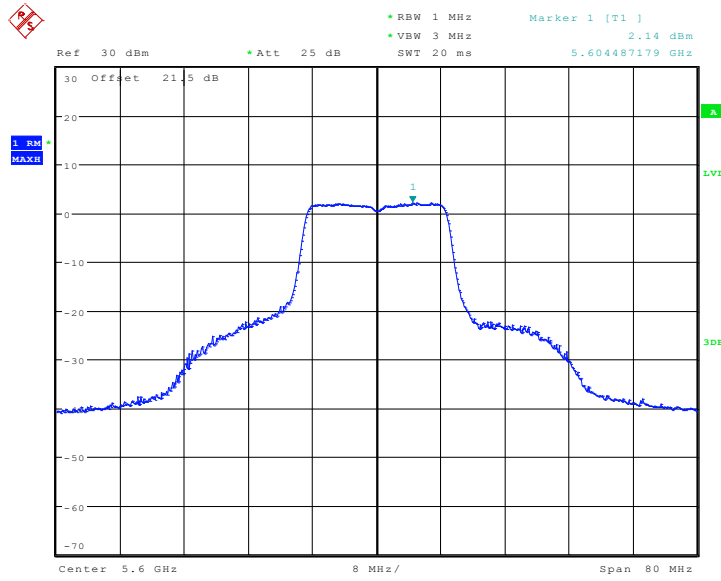
Date: 27.SEP.2013 18:41:30

Fig. 176 Peak Excursions (802.11n-HT20, ch140, peak)



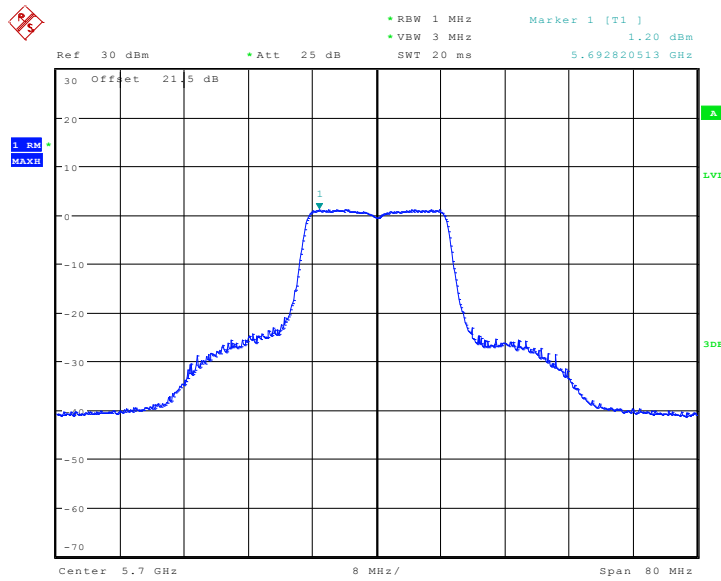
Date: 27.SEP.2013 18:39:34

Fig. 177 Peak Excursions (802.11n-HT20, ch100, average)



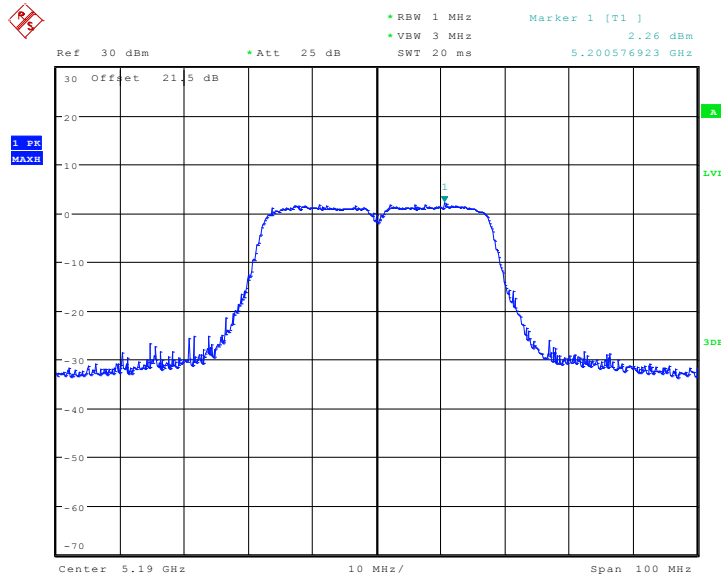
Date: 27.SEP.2013 18:40:39

Fig. 178 Peak Excursions (802.11n-HT20, ch120, average)



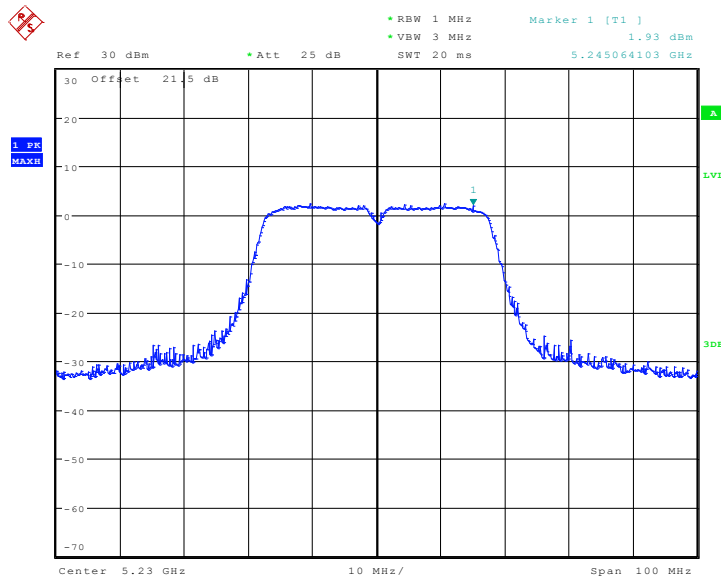
Date: 27.SEP.2013 18:42:06

Fig. 179 Peak Excursions (802.11n-HT20, ch140, average)



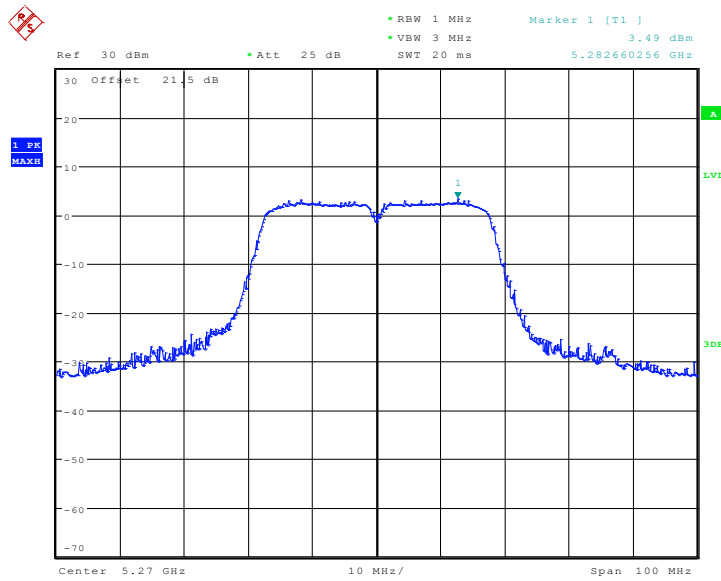
Date: 27.SEP.2013 18:43:33

Fig. 180 Peak Excursions (802.11n-HT40, ch38, peak)



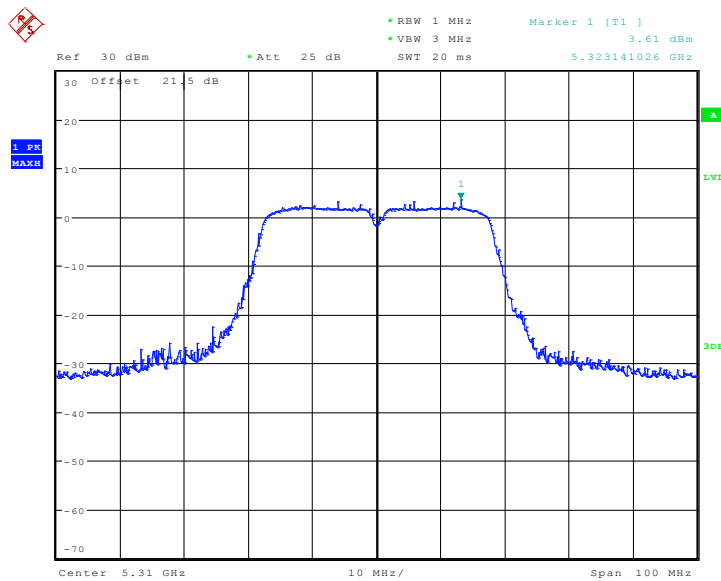
Date: 27.SEP.2013 18:44:53

Fig. 181 Peak Excursions (802.11n-HT40, ch46, peak)



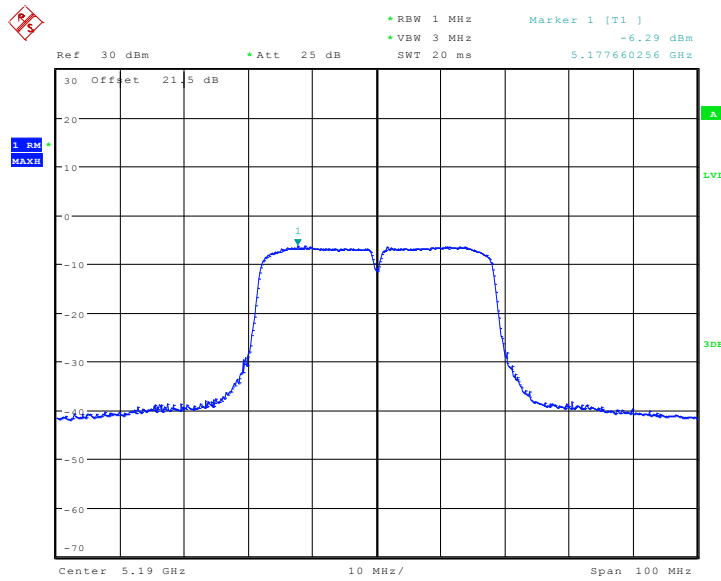
Date: 27.SEP.2013 18:46:21

Fig. 182 Peak Excursions (802.11n-HT40, ch54, peak)



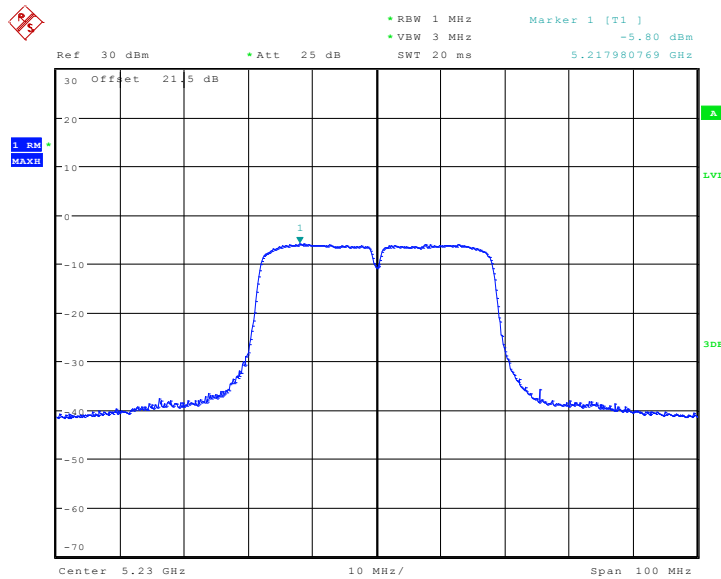
Date: 27.SEP.2013 18:47:30

Fig. 183 Peak Excursions (802.11n-HT40, ch62, peak)



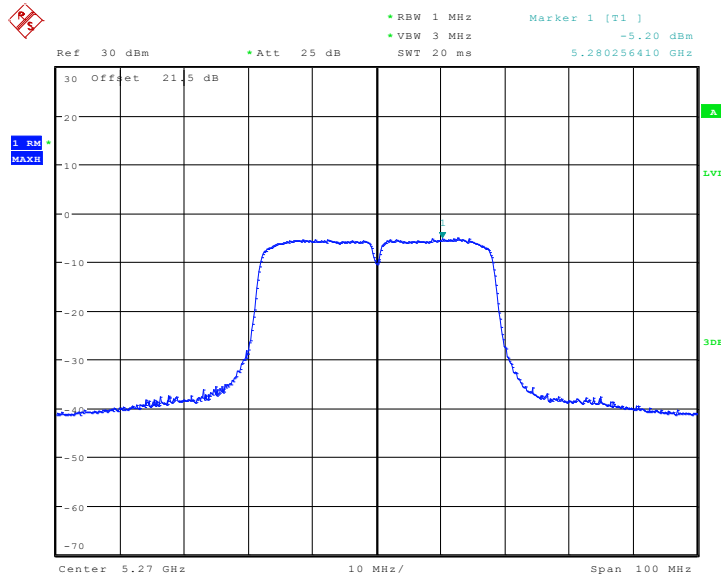
Date: 27.SEP.2013 18:43:49

Fig. 184 Peak Excursions (802.11n-HT40, ch38, average)



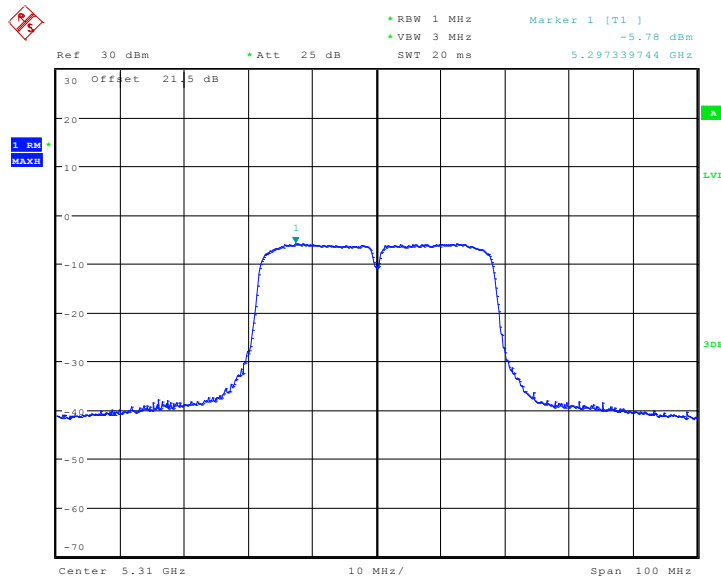
Date: 27.SEP.2013 18:45:21

Fig. 185 Peak Excursions (802.11n-HT40, ch46, average)



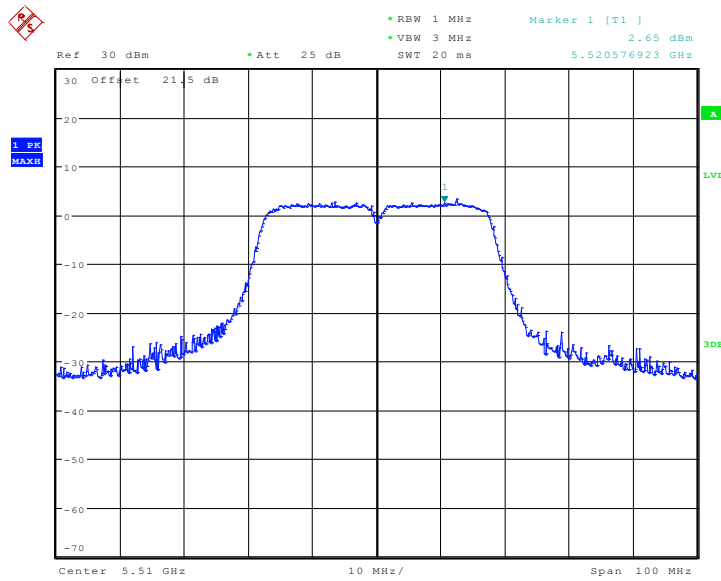
Date: 27.SEP.2013 18:46:43

Fig. 186 Peak Excursions (802.11n-HT40, ch54, average)



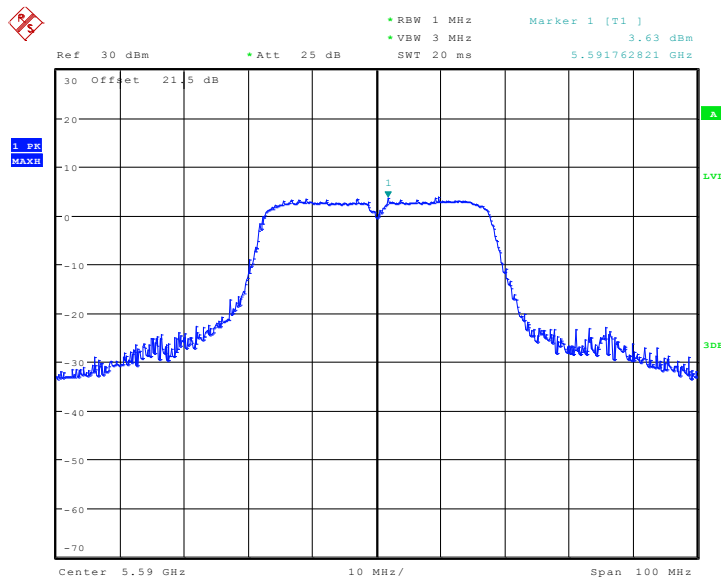
Date: 27.SEP.2013 18:47:44

Fig. 187 Peak Excursions (802.11n-HT40, ch62, average)



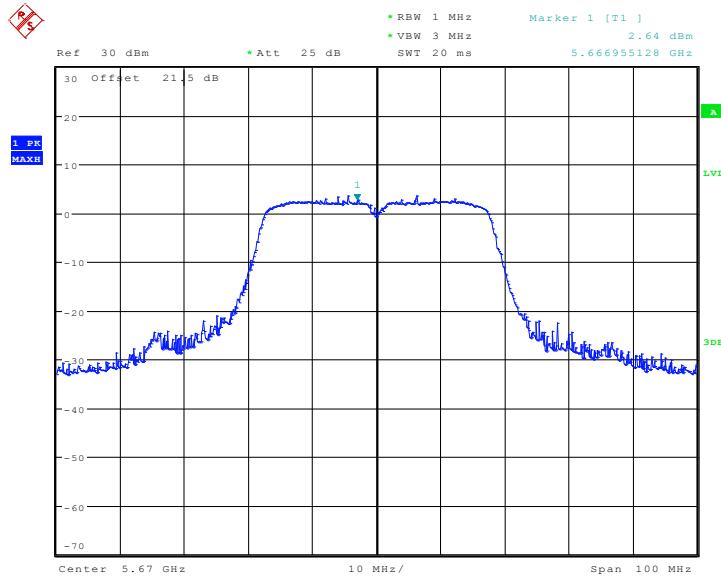
Date: 27.SEP.2013 18:48:20

Fig. 188 Peak Excursions (802.11n-HT40, ch102, peak)



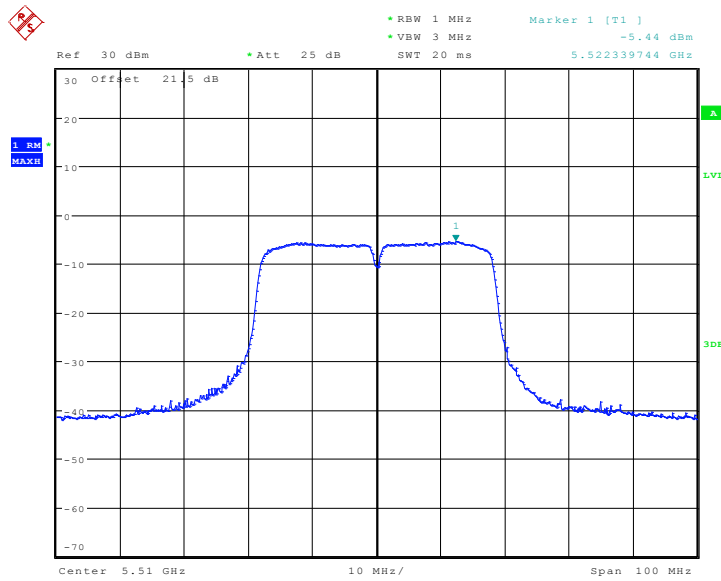
Date: 27.SEP.2013 18:49:24

Fig. 189 Peak Excursions (802.11n-HT40, ch118, peak)



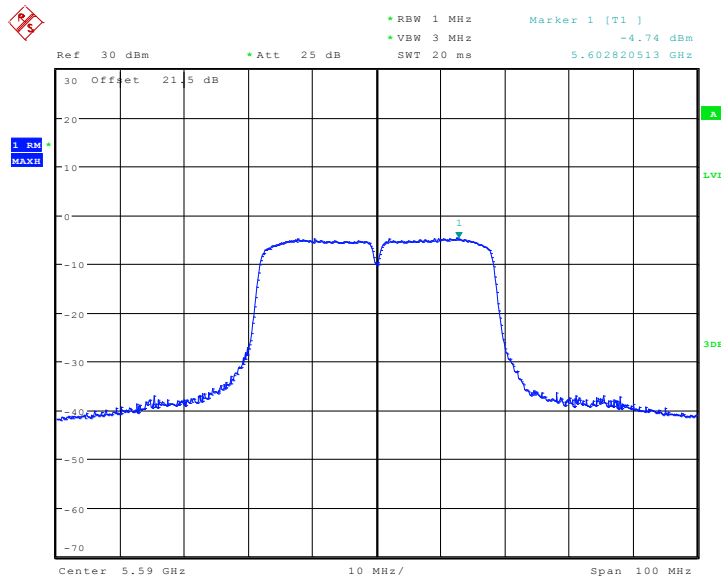
Date: 27.SEP.2013 18:50:34

Fig. 190 Peak Excursions (802.11n-HT40, ch134, peak)



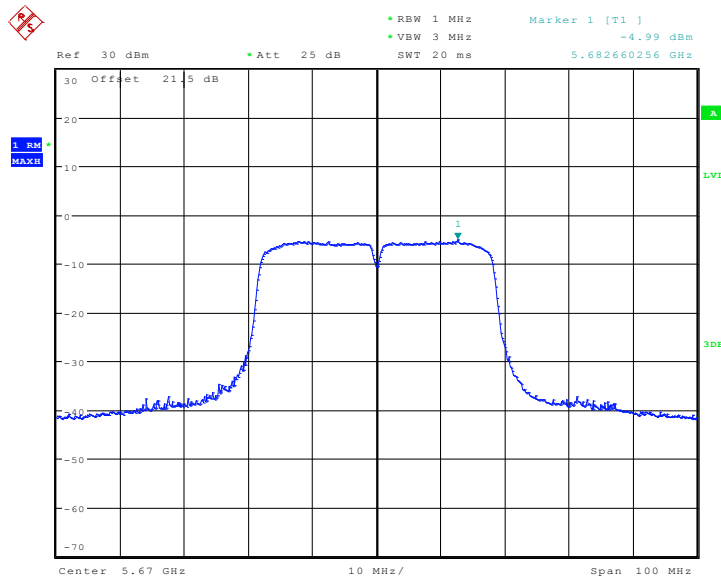
Date: 27.SEP.2013 18:48:44

Fig. 191 Peak Excursions (802.11n-HT40, ch102, average)



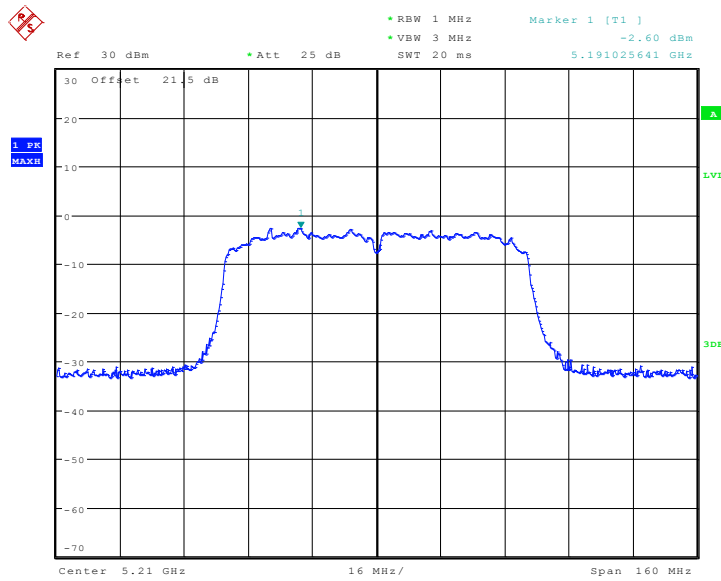
Date: 27.SEP.2013 18:49:43

Fig. 192 Peak Excursions (802.11n-HT40, ch118, average)



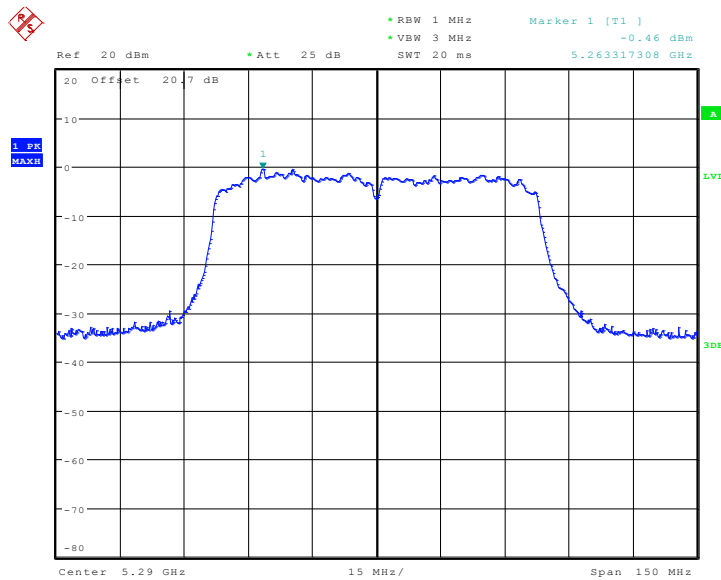
Date: 27.SEP.2013 18:50:51

Fig. 193 Peak Excursions (802.11n-HT40, ch134, average)



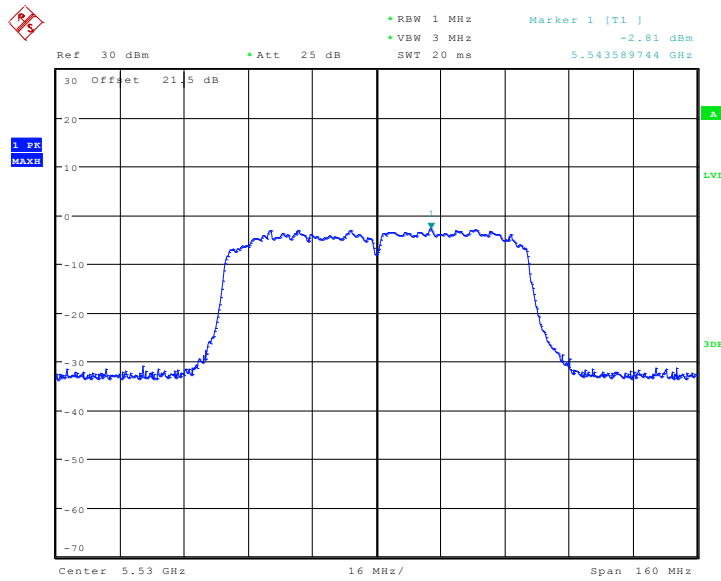
Date: 27.SEP.2013 18:52:12

Fig. 194 Peak Excursions (802.11ac-HT80, ch42, peak)



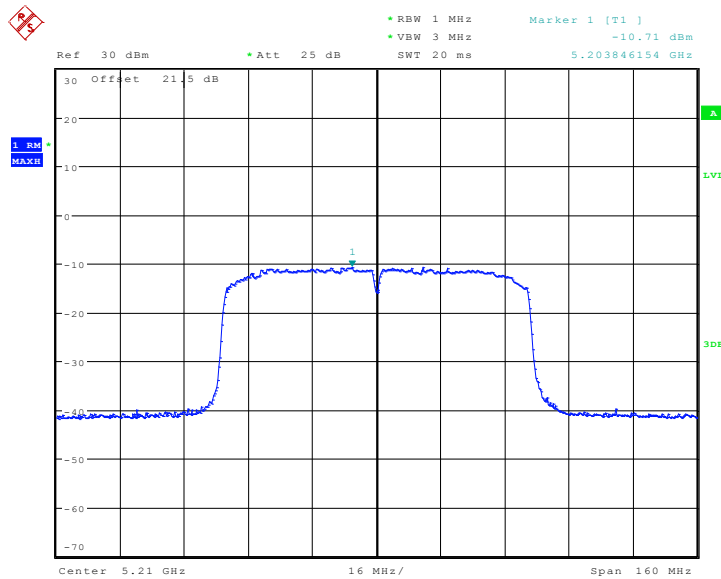
Date: 29.SEP.2013 11:17:15

Fig. 195 Peak Excursions (802.11ac-HT80, ch58, peak)



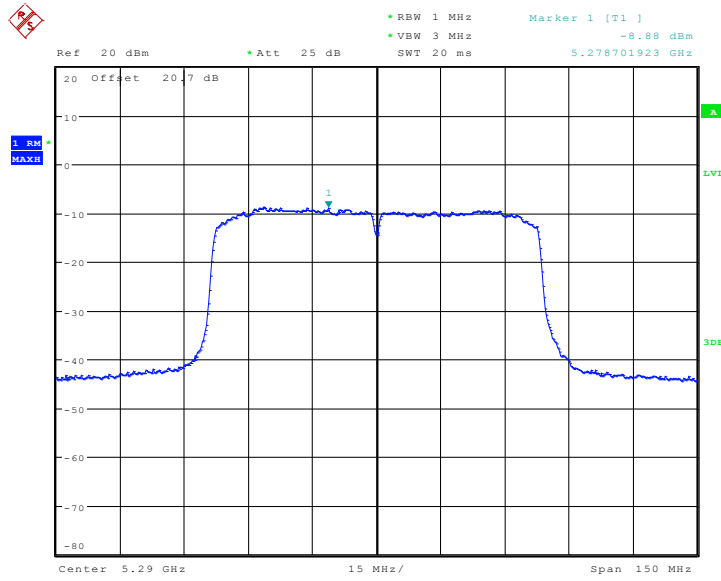
Date: 27.SEP.2013 18:53:18

Fig. 196 Peak Excursions (802.11ac-HT80, ch106, peak)



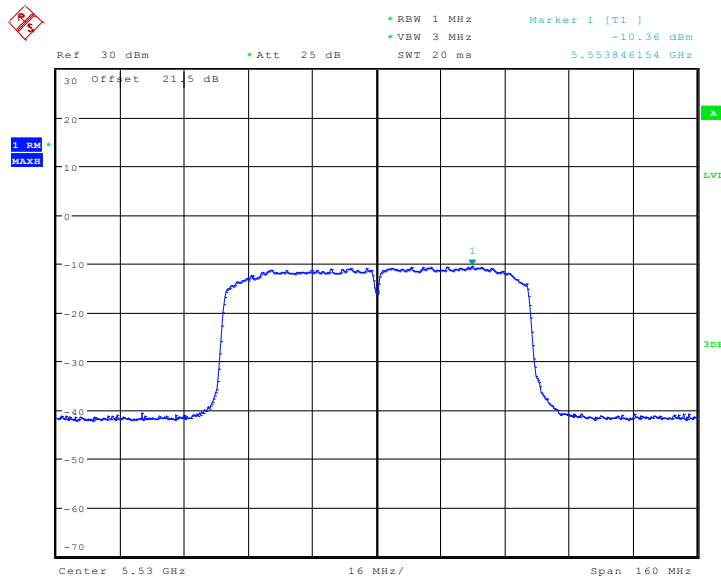
Date: 27.SEP.2013 18:52:34

Fig. 197 Peak Excursions (802.11ac-HT80, ch42, average)



Date: 29.SEP.2013 11:17:50

Fig. 198 Peak Excursions (802.11ac-HT80, ch58, average)



Date: 27.SEP.2013 18:53:41

Fig. 199 Peak Excursions (802.11ac-HT80, ch106, average)

A.10. 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.

A.11. Power control

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