

Fig.22 Occupied 26dB Bandwidth (802.11ac-HT40, 5230MHz)

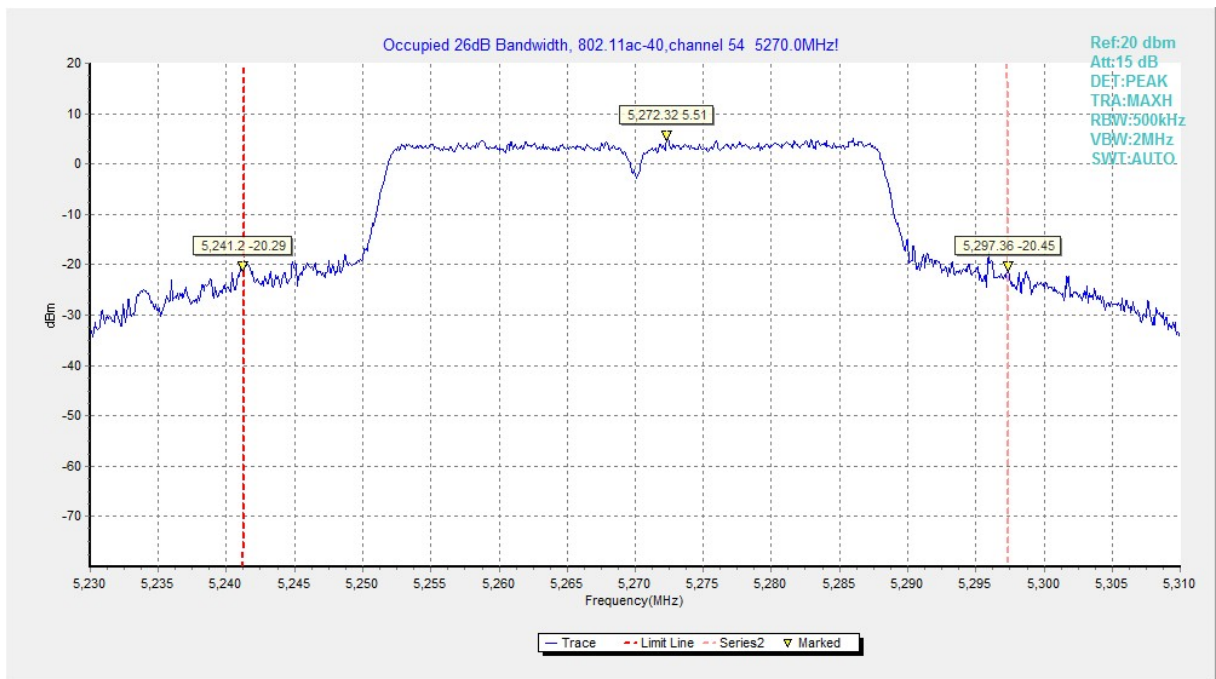


Fig.23 Occupied 26dB Bandwidth (802.11ac-HT40, 5270MHz)

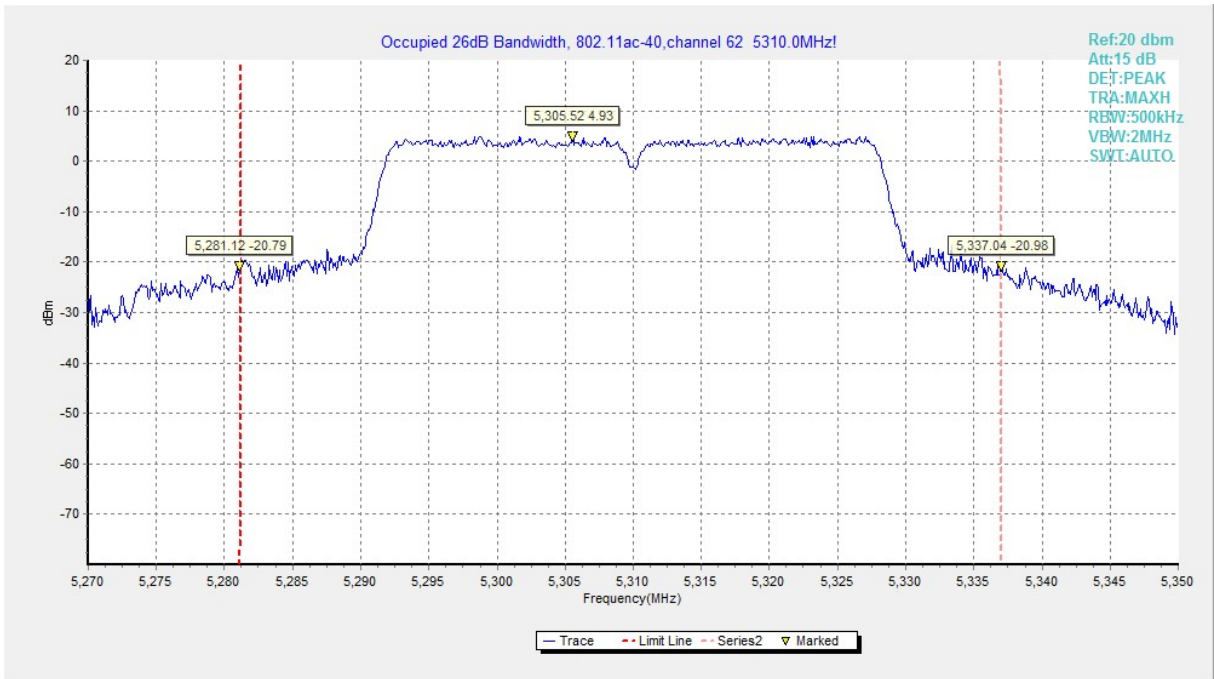


Fig.24 Occupied 26dB Bandwidth (802.11ac-HT40, 5310MHz)

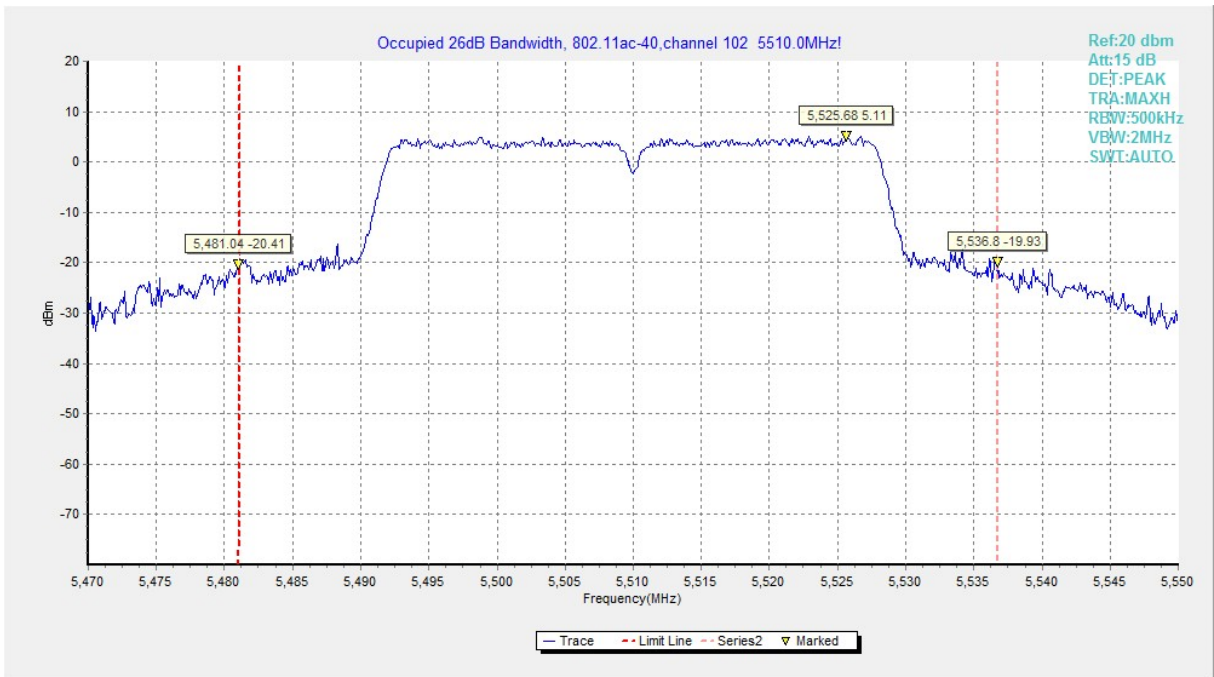


Fig.25 Occupied 26dB Bandwidth (802.11ac-HT40, 5510MHz)

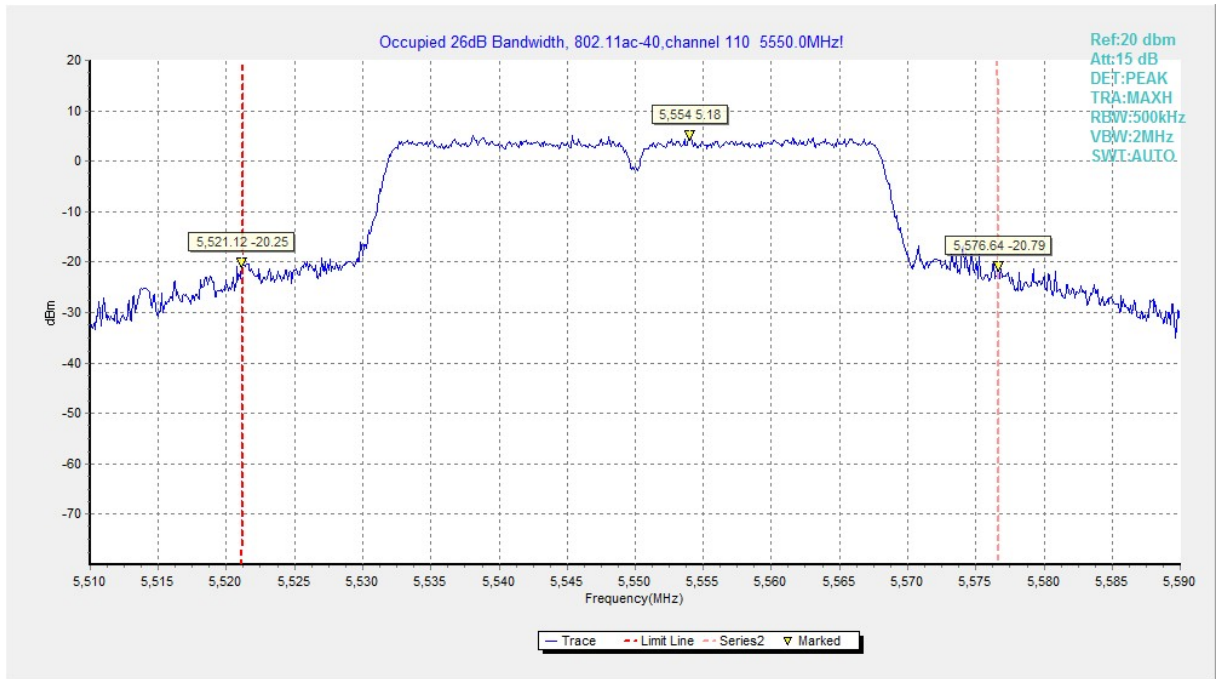


Fig.26 Occupied 26dB Bandwidth (802. 11ac-HT40, 5550MHz)

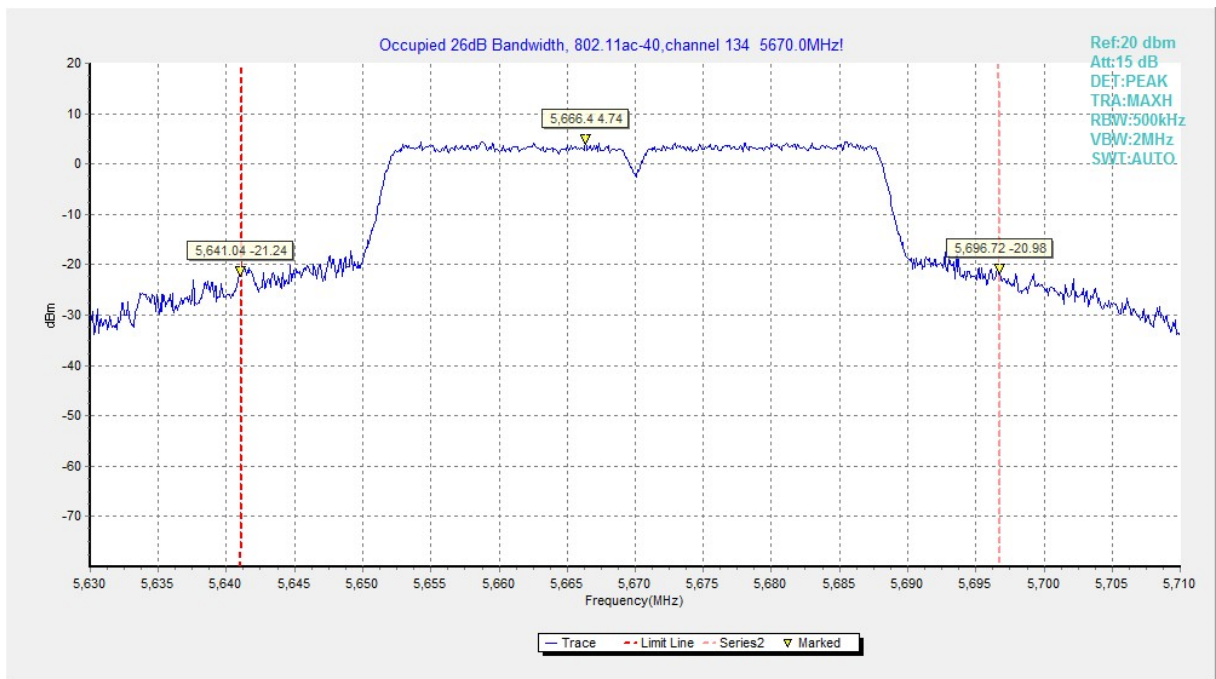


Fig.27 Occupied 26dB Bandwidth (802. 11ac-HT40, 5670MHz)

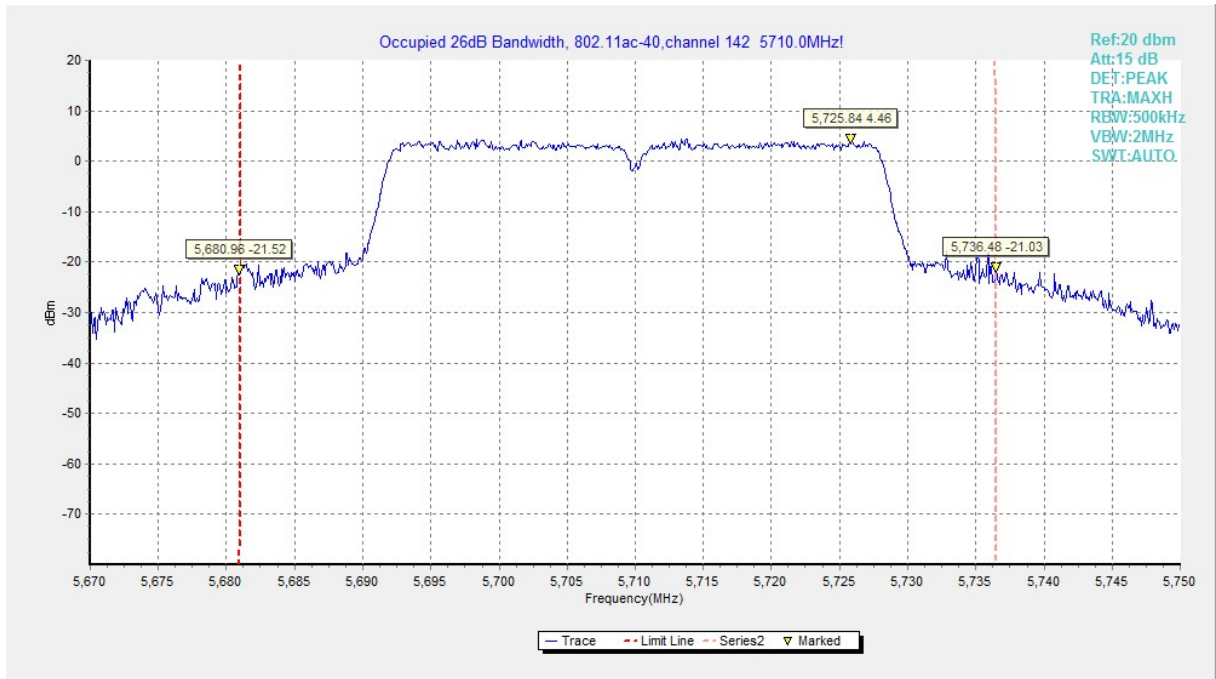


Fig.28 Occupied 26dB Bandwidth (802. 11ac-HT40, 5710MHz)

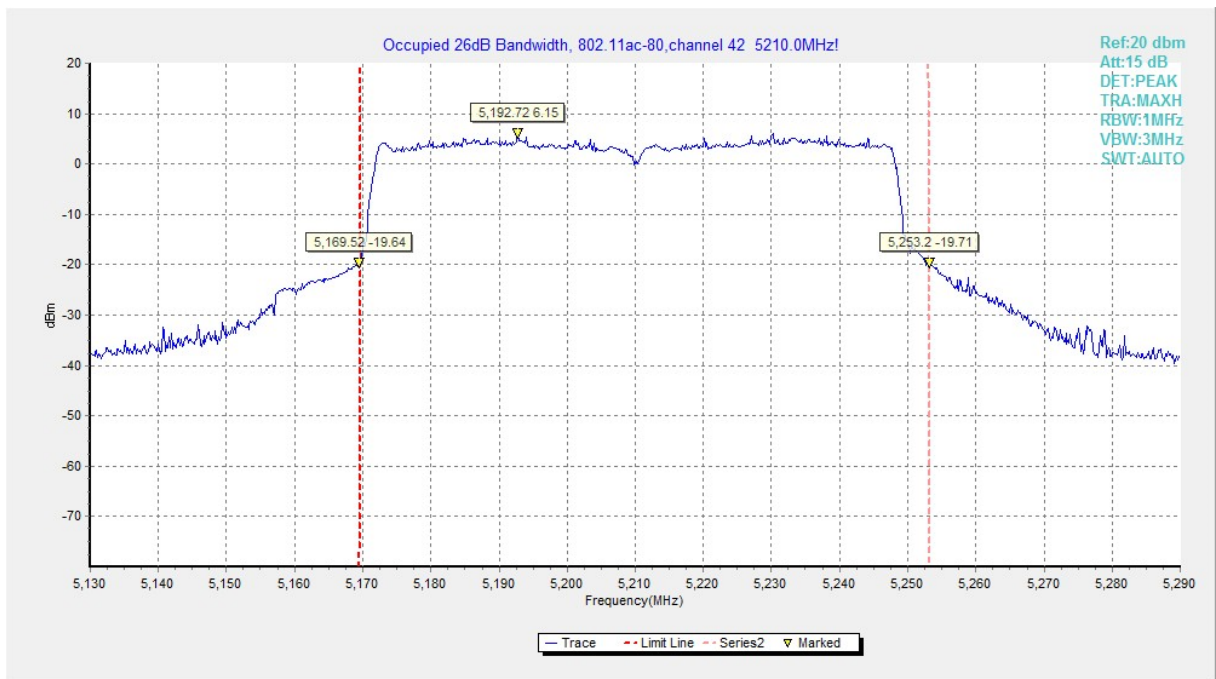


Fig.29 Occupied 26dB Bandwidth (802. 11ac-HT80, 5210MHz)

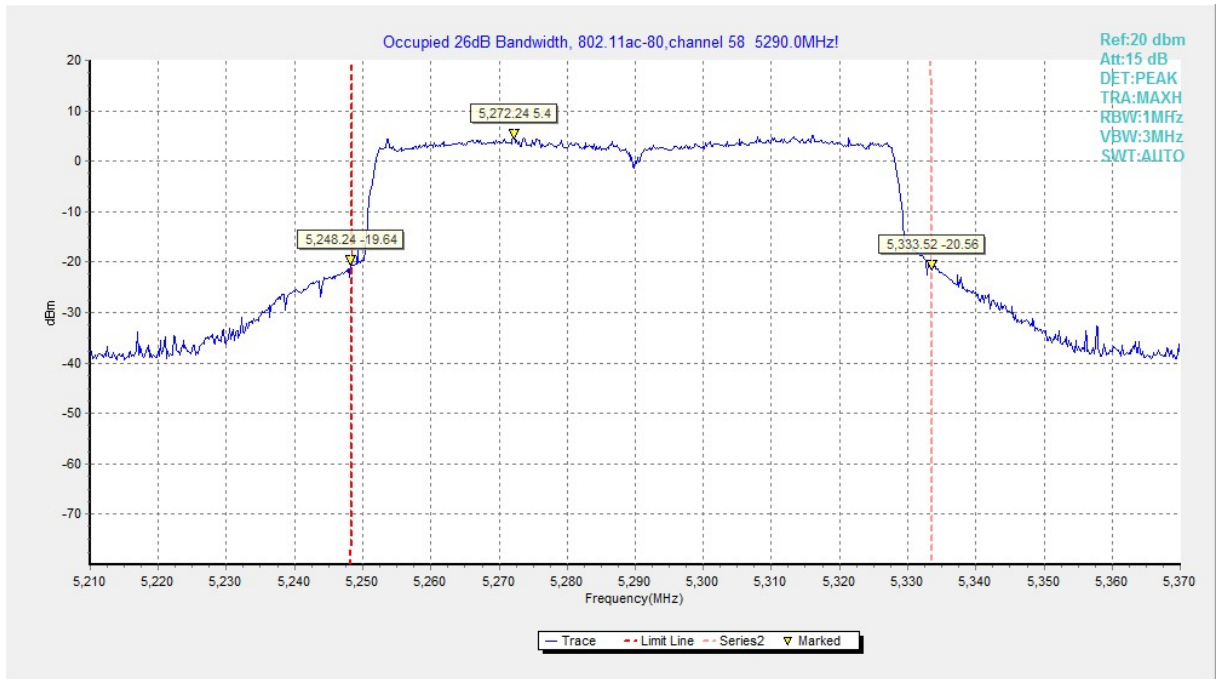


Fig.30 Occupied 26dB Bandwidth (802. 11ac-HT80, 5290MHz)

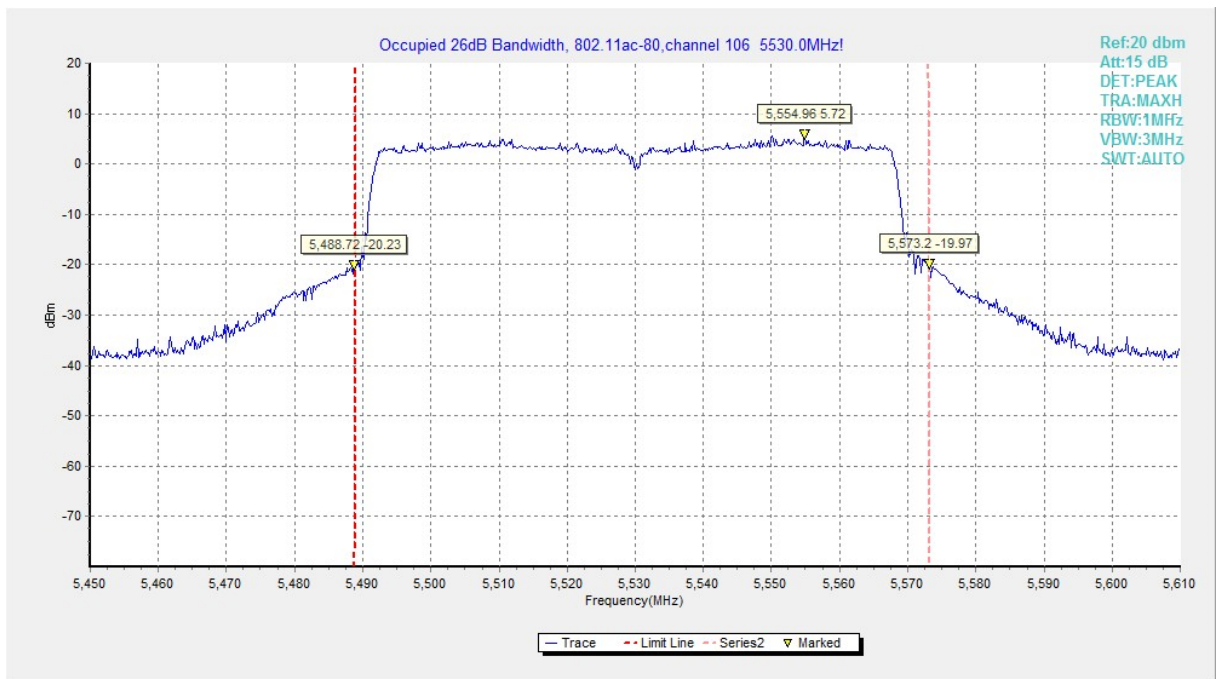


Fig.31 Occupied 26dB Bandwidth (802. 11ac-HT80, 5530MHz)

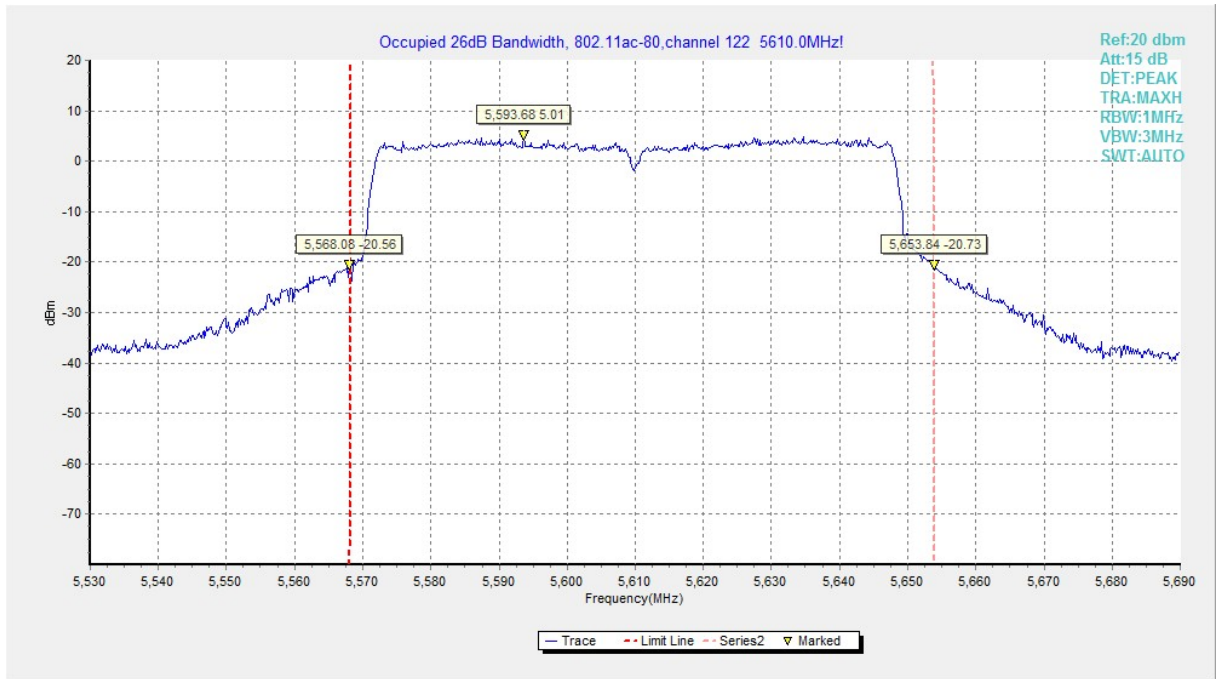


Fig.32 Occupied 26dB Bandwidth (802.11ac-HT80, 5610MHz)

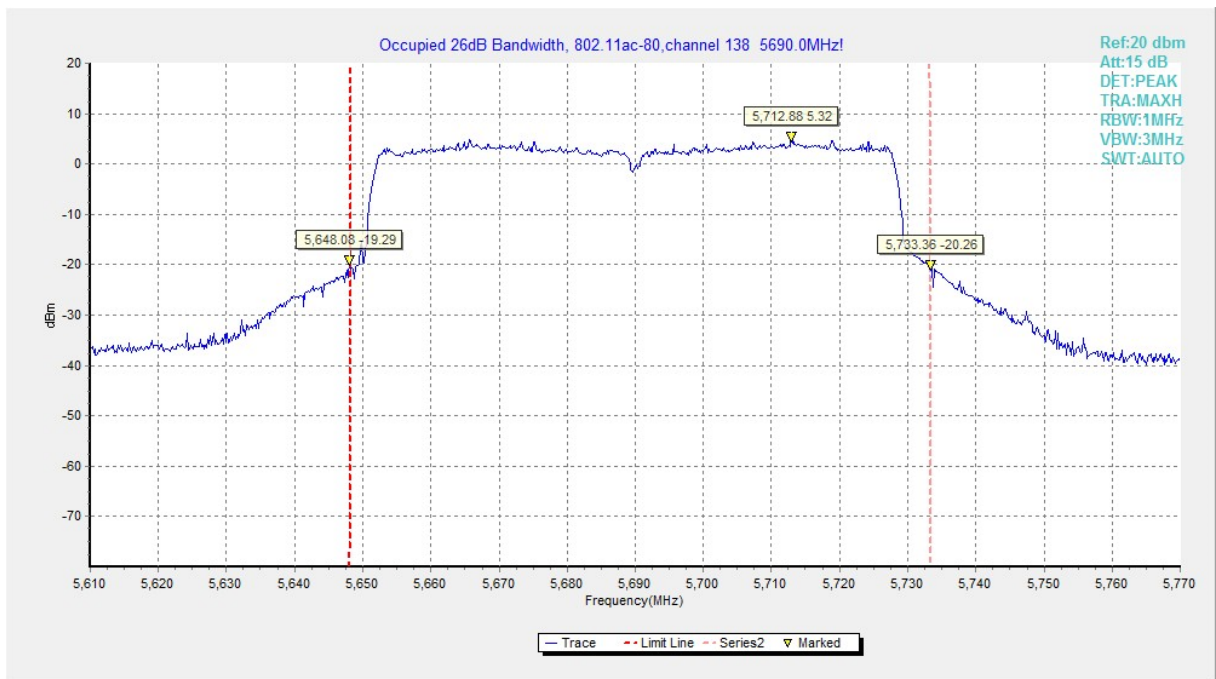


Fig.33 Occupied 26dB Bandwidth (802.11ac-HT80, 5690MHz)

A.5. Band Edges Compliance

A5.1 Band Edges - Radiated

Measurement Limit:

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

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

Limit in restricted band:

Frequency of emission (MHz)	Field strength(uV/m)	Field strength(dBuV/m)	Measurement distance(m)
30-88	100	40	3
88-216	150	43.5	3
216-960	200	46	3
Above 960	500	54	3

The measurement is made according to ANSI C63.10-2013 and KDB 789033

Set up:

Tabletop devices shall be placed on a nonconducting platform with nominal top surface dimensions 1 m by 1.5 m and the table height shall be 1.5 m.

The EUT and transmitting antenna shall be centered on the turntable.

Test Procedure

The EUT was placed on a non-conductive table. The measurement antenna was placed at a distance of 3 meters from the EUT. The test is carried out on both vertical and horizontal polarization and only maximization result of both polarizations is kept. During the test, the turntable is rotated 360° and the measurement antenna is moved from 1m to 4m to get the maximization result. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

The receiver references:

Frequency of emission (MHz)	RBW/VBW	Sweep Time(s)
30-1000	100kHz/300kHz	5
1000-4000	1MHz/3MHz	15
4000-18000	1MHz/3MHz	40
18000-26500	1MHz/3MHz	20

Spot check Measurement Result:

Mode	Channel	Test Results	Conclusion
802.11a	5180 MHz	Fig.34	P
802.11n HT20	5320 MHz	Fig.35	P
	5500 MHz	Fig.36	P
802.11n HT40	5190 MHz	Fig.37	P
	5310 MHz	Fig.38	P
	5510 MHz	Fig.39	P
802.11ac HT80	5210MHz	Fig.40	P

Reference Measurement Result:

Mode	Channel	Test Results	Conclusion
802.11a	5180 MHz	Fig.41	P
	5320 MHz	Fig.42	P
	5500 MHz	Fig.43	P
	5700 MHz	Fig.44	P
	5680 MHz	Fig.45	P
802.11n HT20	5180 MHz	Fig.46	P
	5320 MHz	Fig.47	P
	5500 MHz	Fig.48	P
	5700 MHz	Fig.49	P
	5680 MHz	Fig.50	P
802.11n HT40	5190 MHz	Fig.51	P
	5310 MHz	Fig.52	P
	5510 MHz	Fig.53	P
	5670 MHz	Fig.54	P
802.11ac HT20	5180 MHz	Fig.55	P
	5320 MHz	Fig.56	P
	5500 MHz	Fig.57	P
	5700 MHz	Fig.58	P
	5680 MHz	Fig.59	P
802.11ac HT40	5190 MHz	Fig.60	P
	5310 MHz	Fig.61	P
	5510 MHz	Fig.62	P
	5670 MHz	Fig.63	P
802.11ac HT80	5210MHz	Fig.64	P
	5290MHz	Fig.65	P
	5530MHz	Fig.66	P
	5610MHz	Fig.67	P

Conclusion: PASS

Test graphs as below:

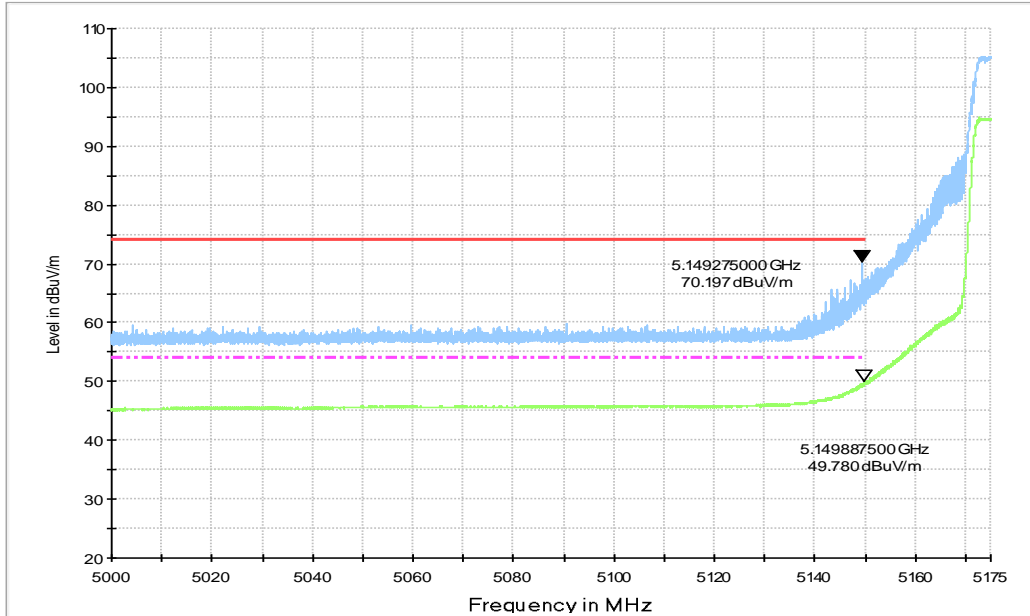


Fig.34 Band Edges (802.11a Ch36, 5180MHz)

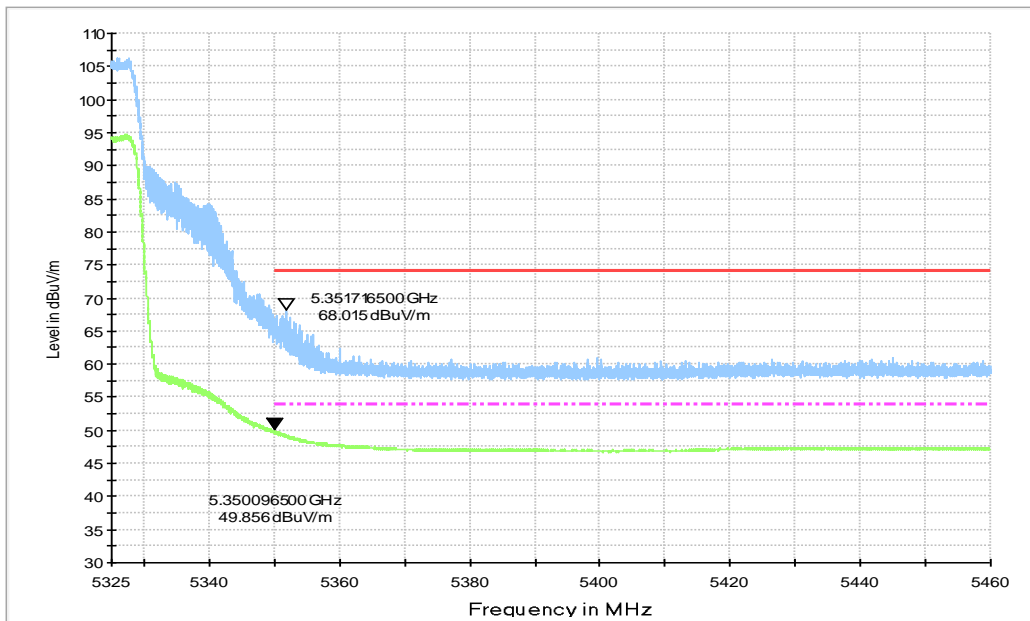


Fig.35 Band Edges (802.11n-HT20 Ch64, 5320MHz)

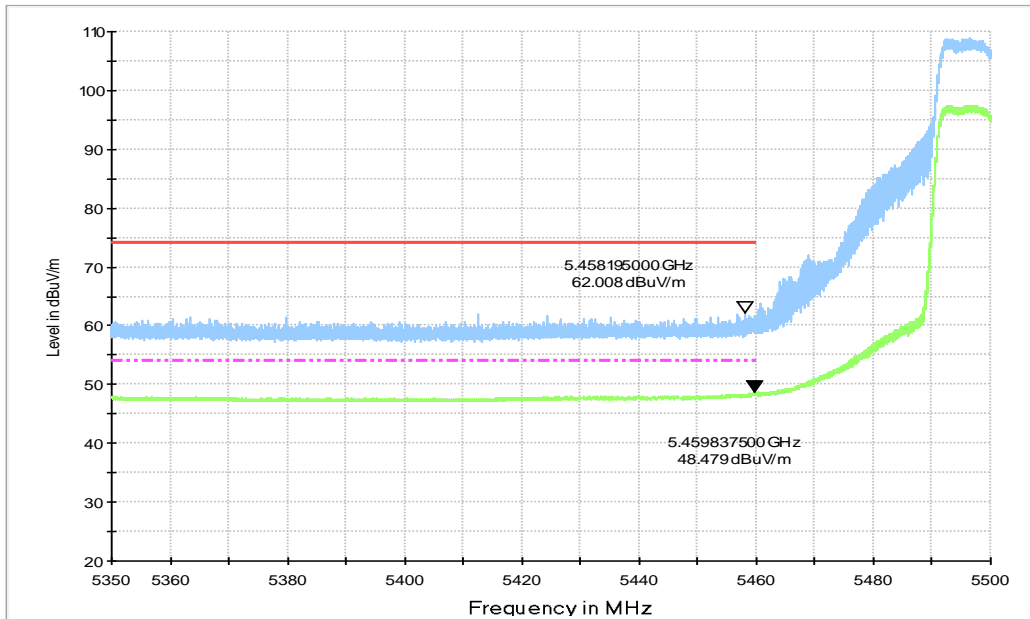


Fig.36 Band Edges (802.11n-HT20 Ch100, 5500MHz)

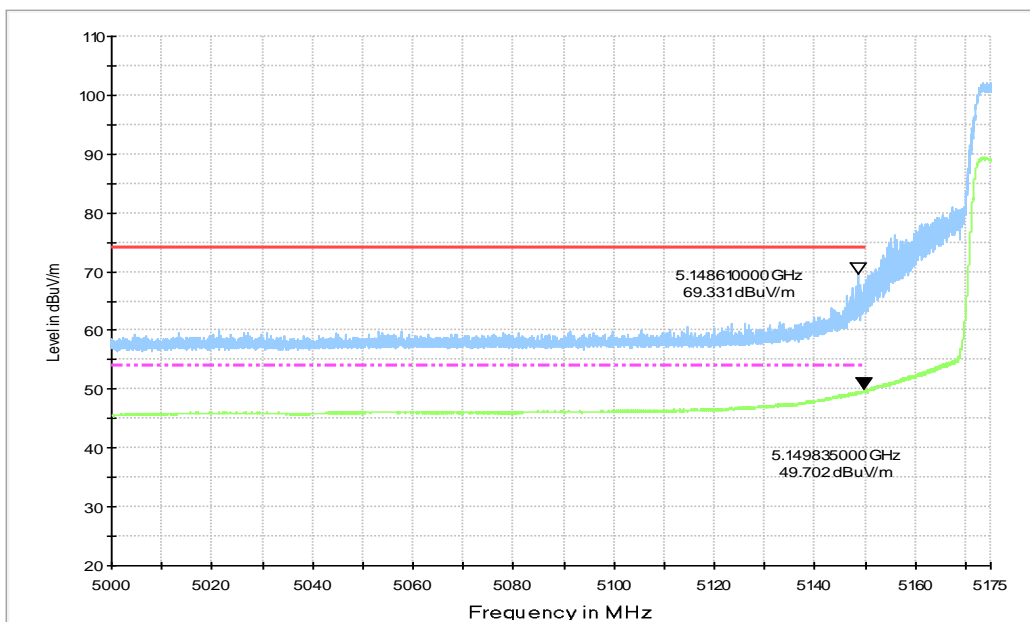


Fig.37 Band Edges (802.11n-HT40 Ch38, 5190MHz)

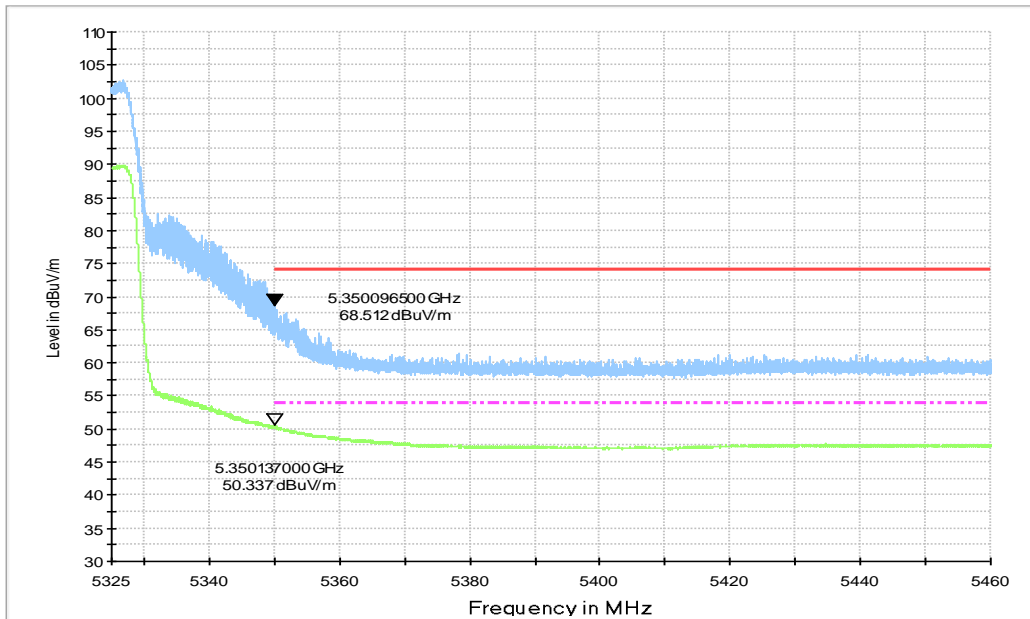


Fig.38 Band Edges (802.11n-HT40 Ch62, 5310MHz)

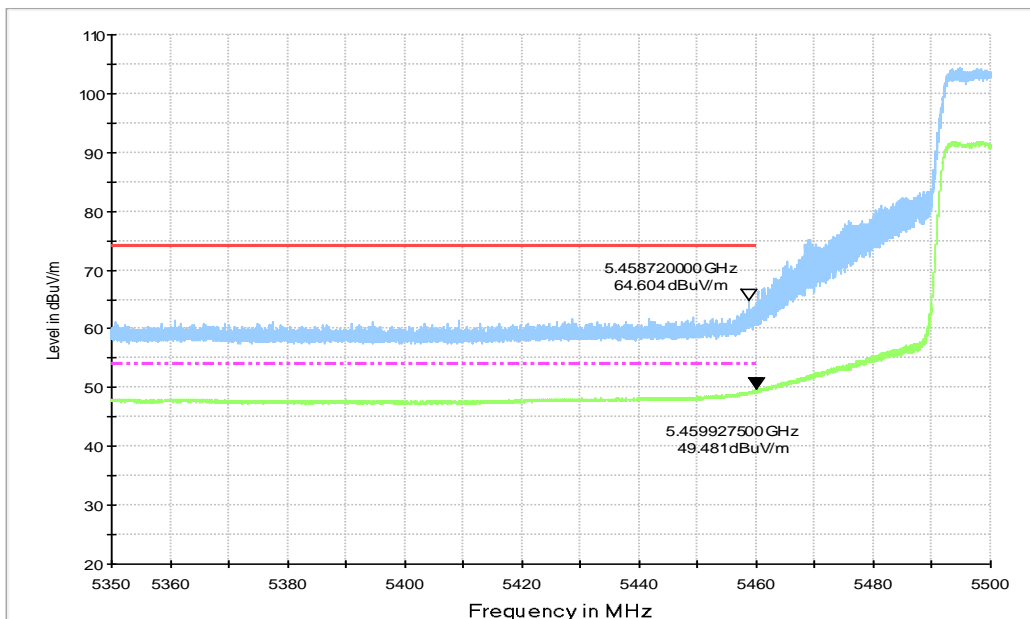


Fig.39 Band Edges (802.11n-HT40 Ch102, 5510MHz)

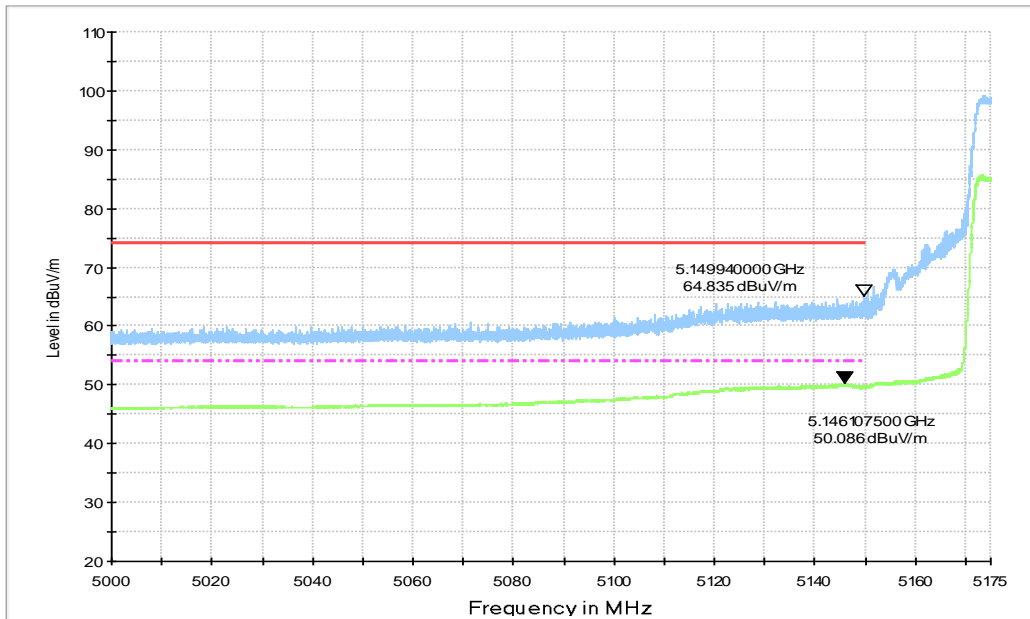


Fig.40 Band Edges (802.11ac-HT80 Ch42 , 5210MHz)

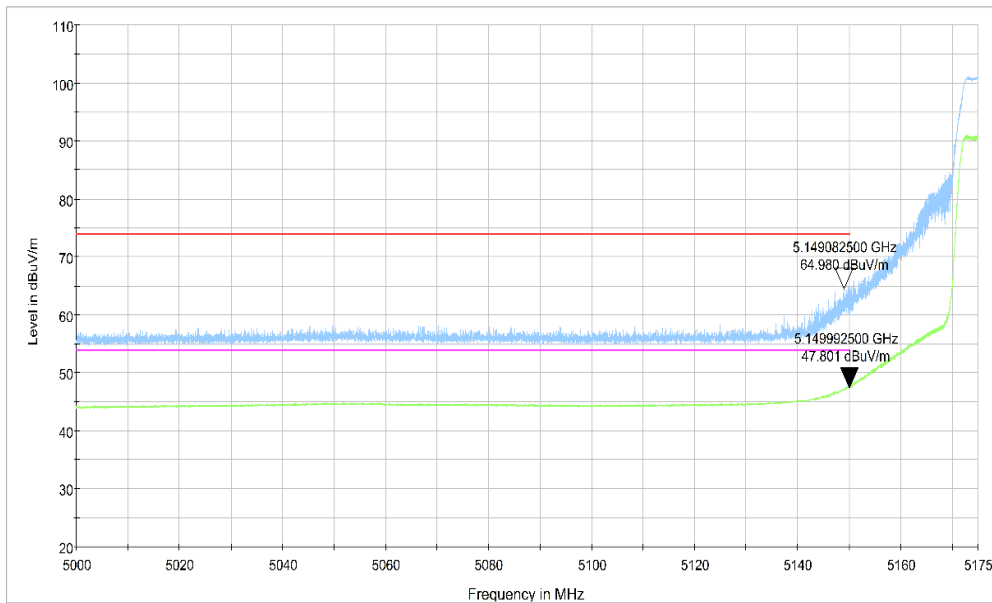


Fig.41 Band Edges (802.11a Ch36, 5180MHz)

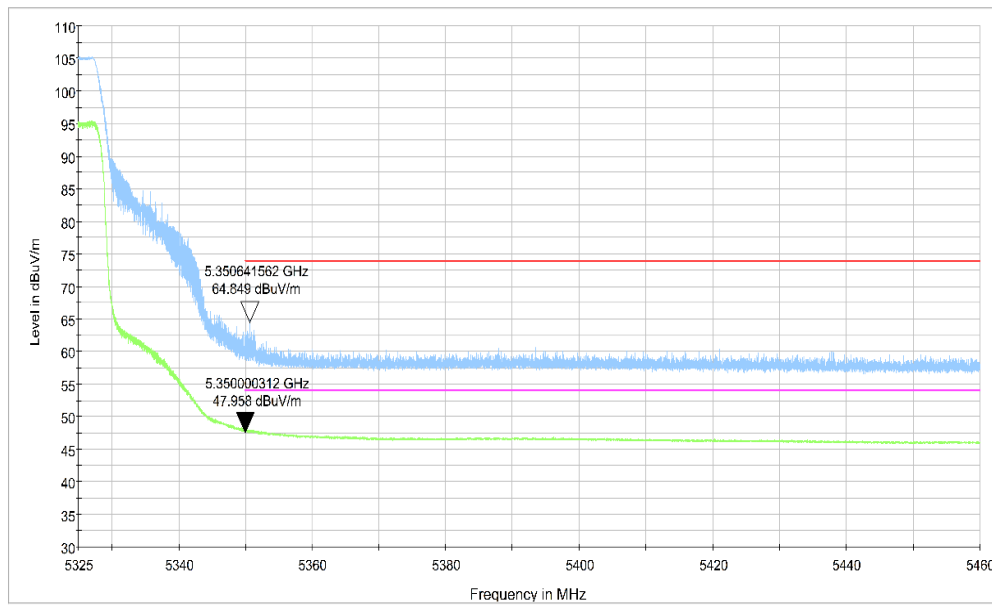


Fig.42 Band Edges (802.11a Ch64, 5320MHz)

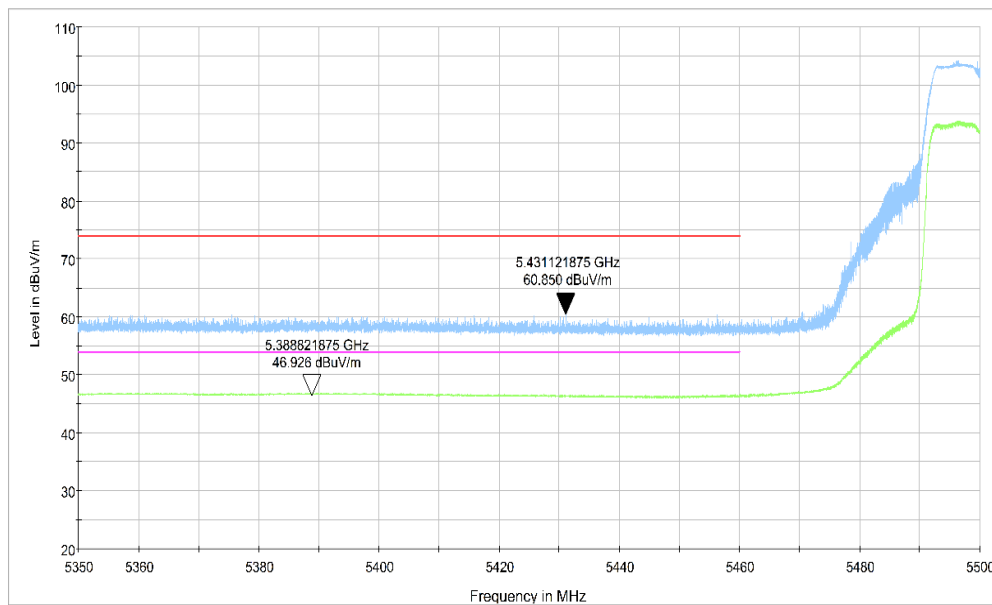


Fig.43 Band Edges (802.11a Ch100, 5500MHz)

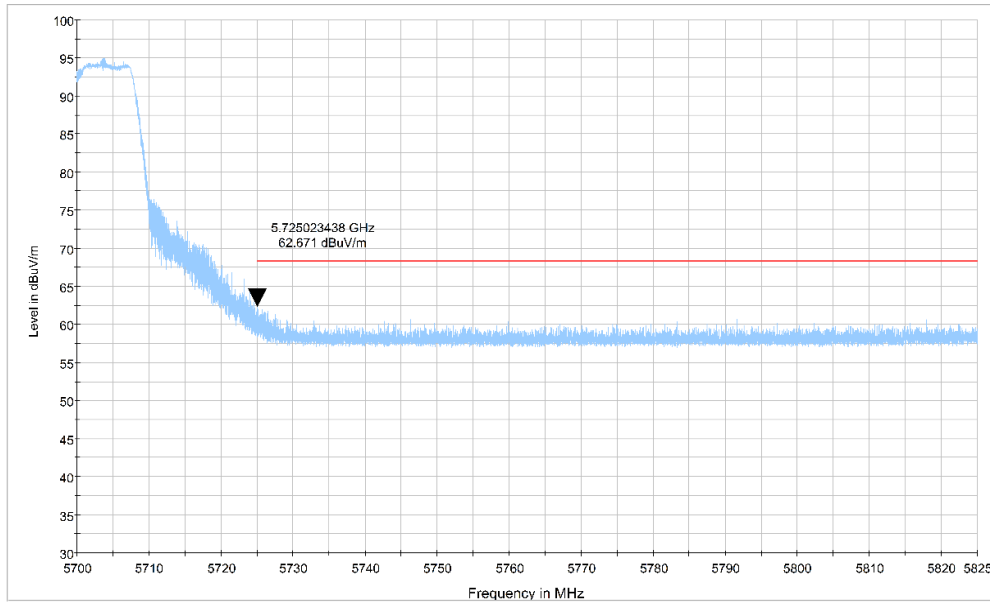


Fig.44 Band Edges (802.11a Ch140, 5700MHz)

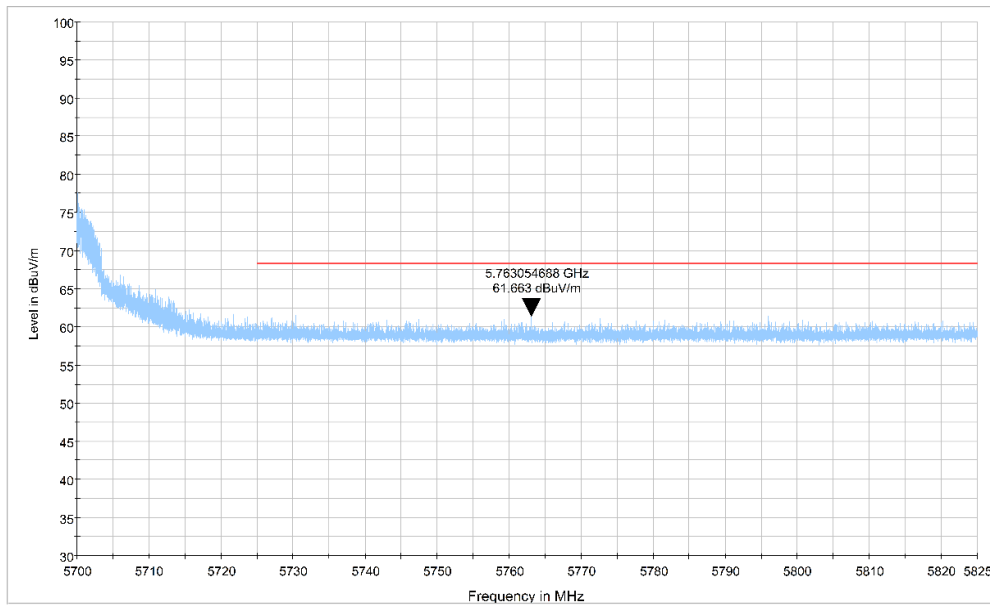


Fig.45 Band Edges (802.11a Ch136, 5680MHz)

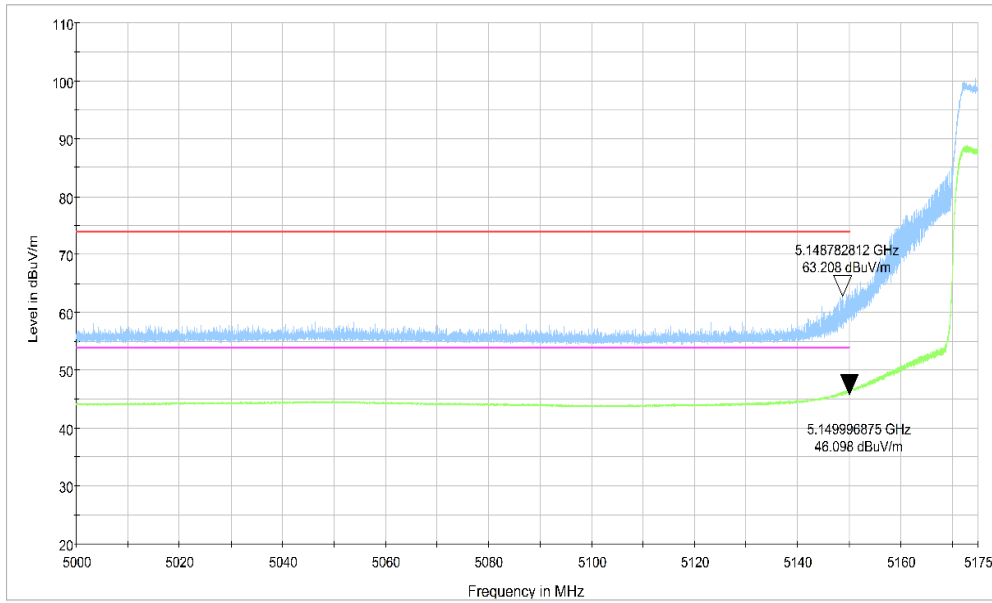


Fig.46 Band Edges (802.11n-HT20 Ch36, 5180MHz)

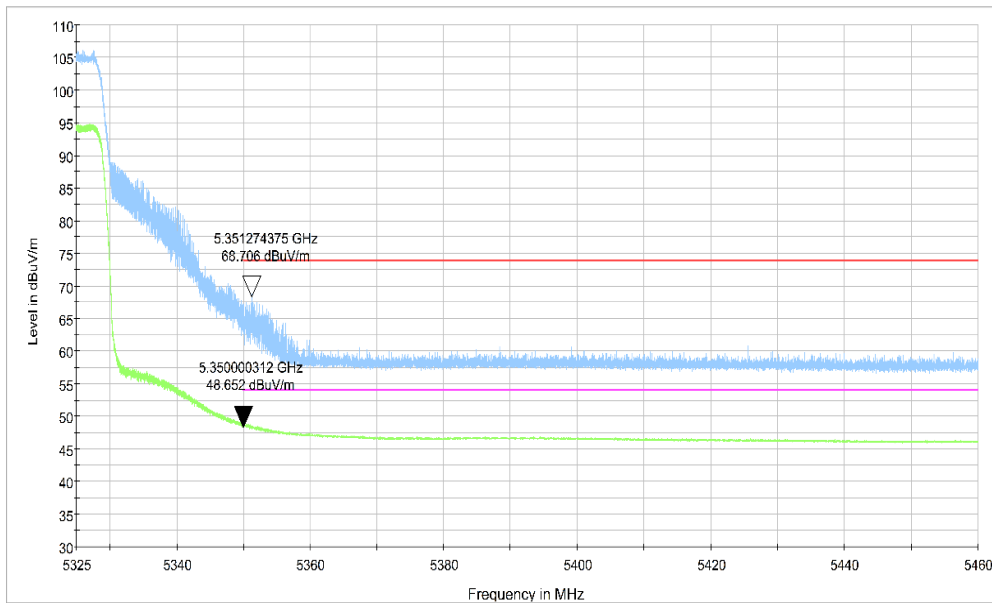


Fig.47 Band Edges (802.11n-HT20 Ch64, 5320MHz)

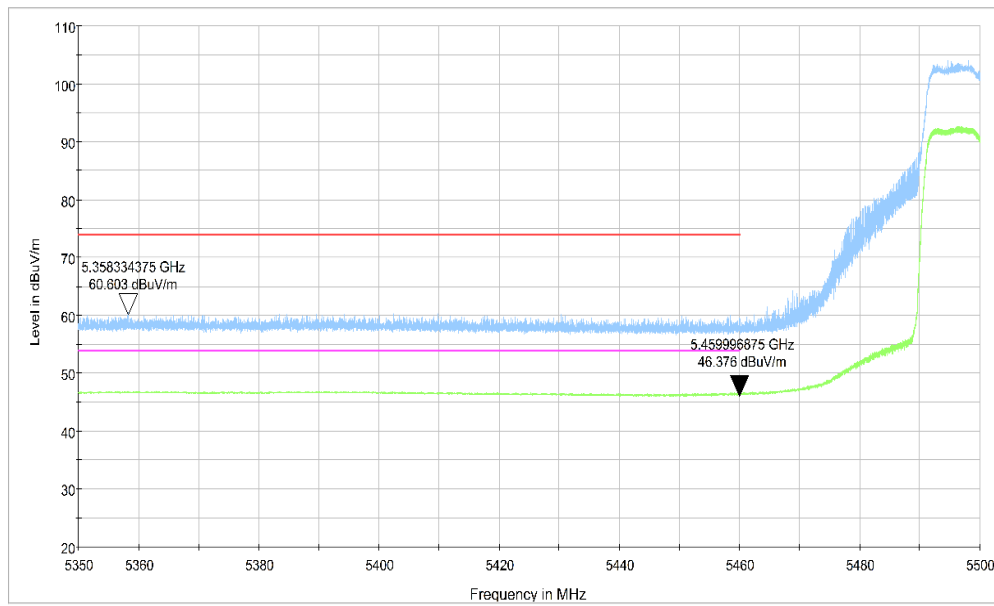


Fig.48 Band Edges (802.11n-HT20 Ch100, 5500MHz)

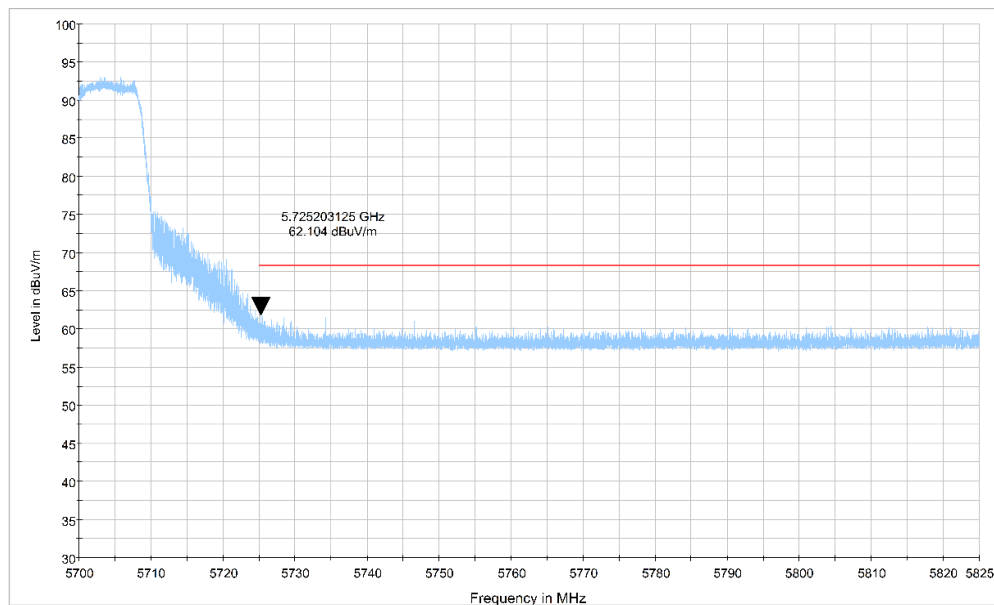


Fig.49 Band Edges (802.11n-HT20 Ch140, 5700MHz)

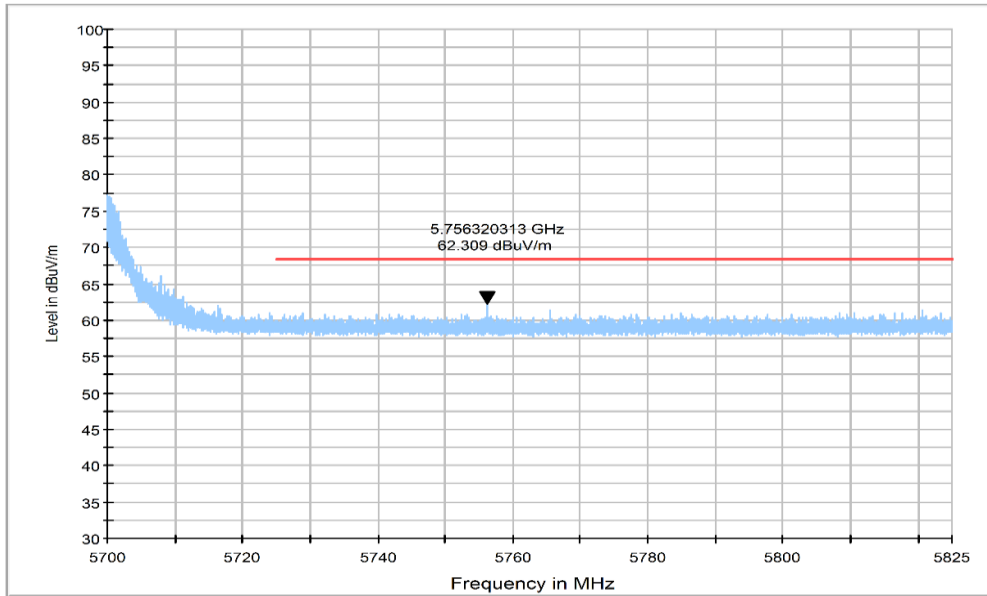


Fig.50 Band Edges (802.11n-HT20 Ch136, 5680MHz)

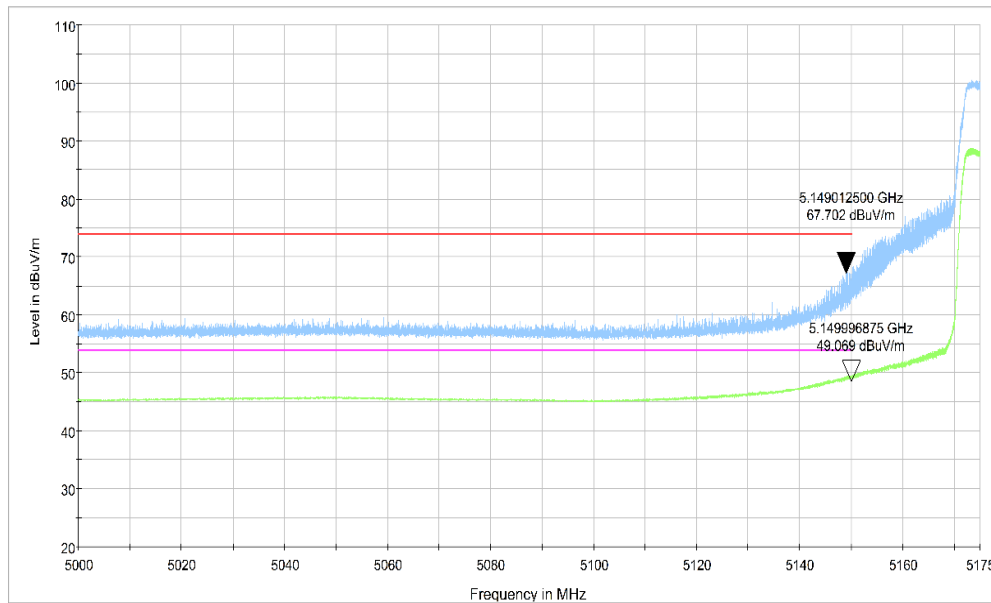


Fig.51 Band Edges (802.11n-HT40 Ch38, 5190MHz)

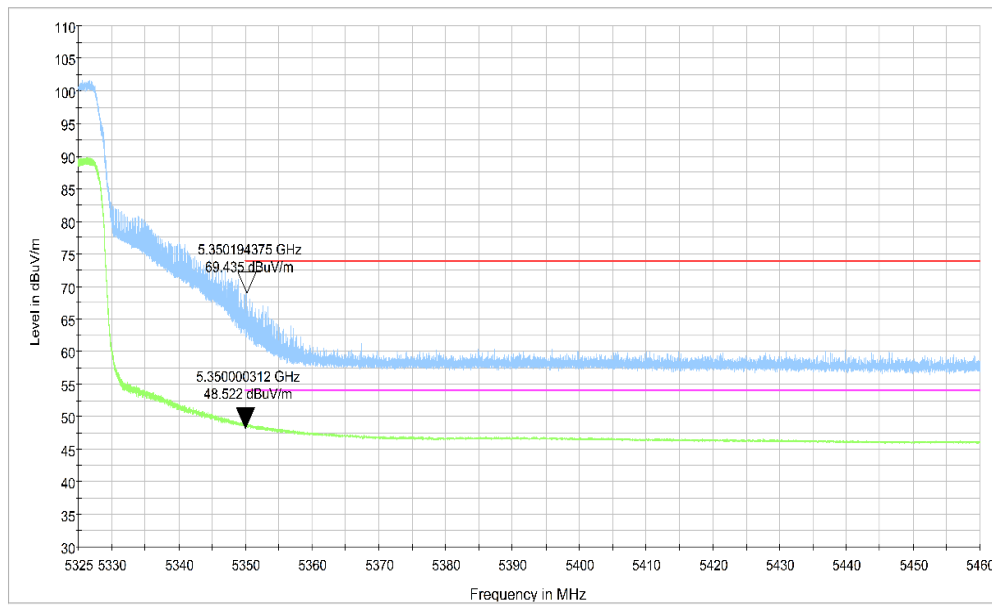


Fig.52 Band Edges (802.11n-HT40 Ch62, 5310MHz)

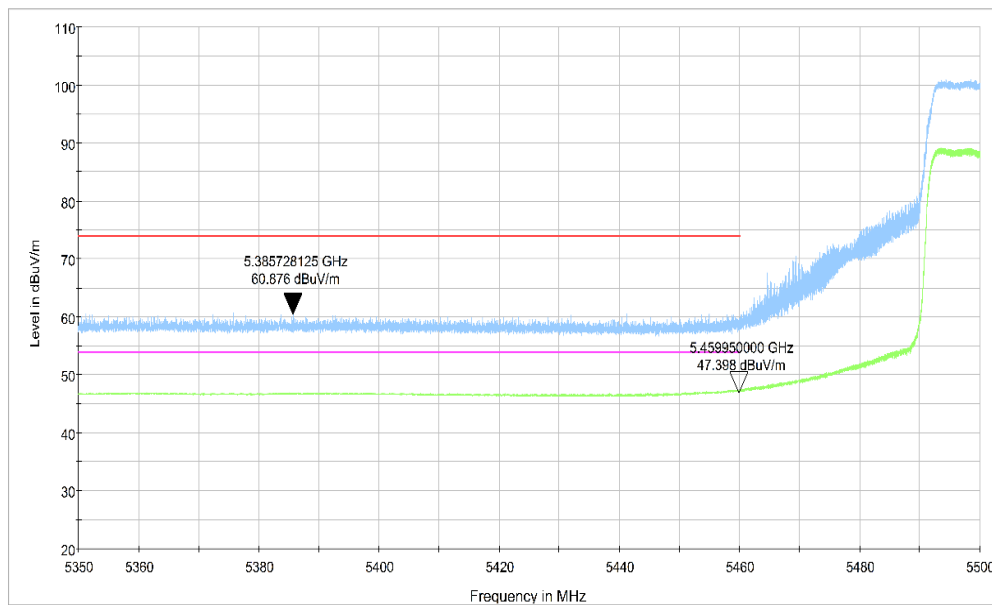


Fig.53 Band Edges (802.11n-HT40 Ch102, 5510MHz)

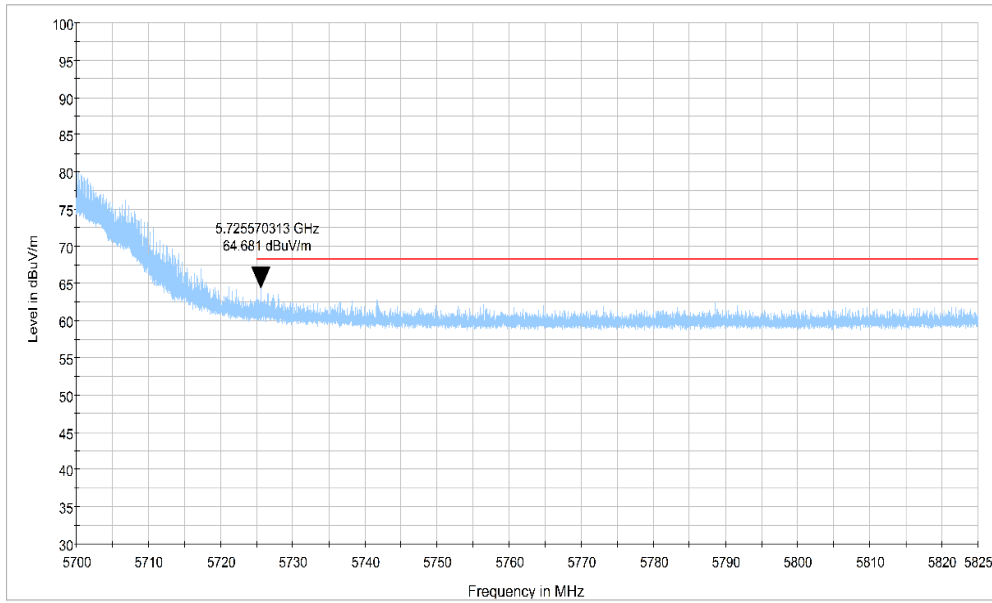


Fig.54 Band Edges (802.11n-HT40 Ch134, 5670MHz)

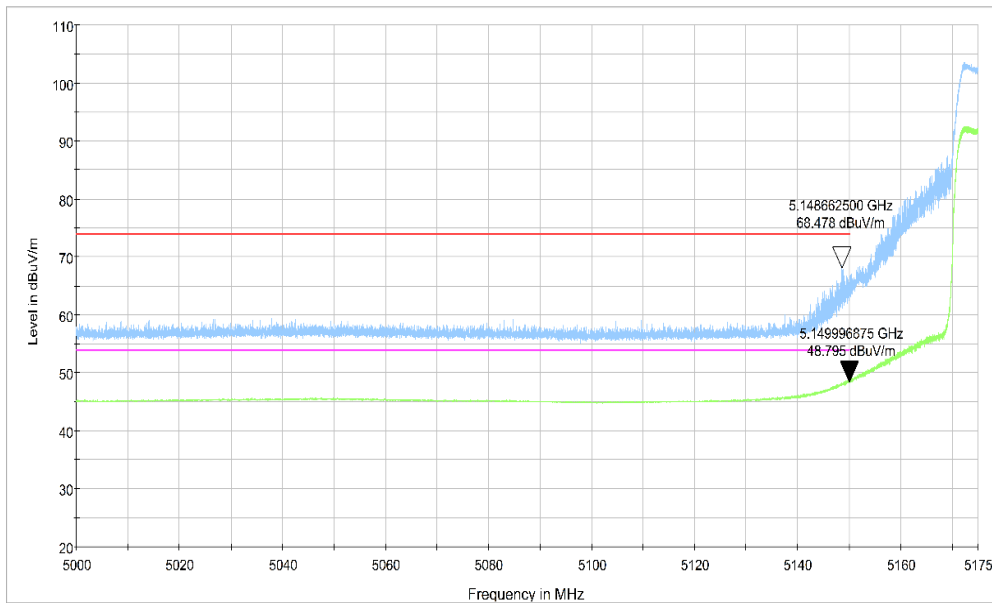


Fig.55 Band Edges (802.11ac-HT20 Ch36, 5180MHz)

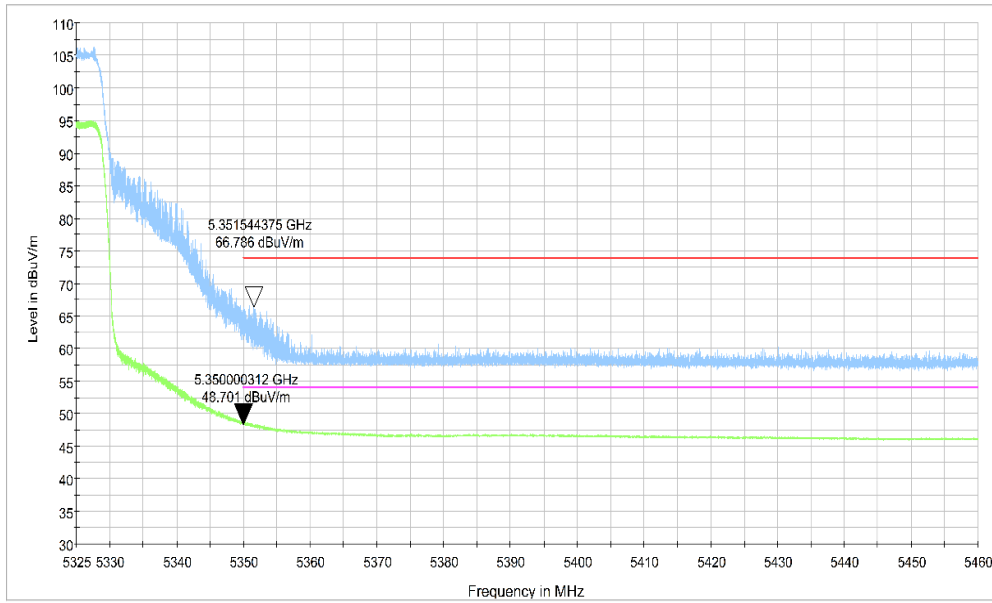


Fig.56 Band Edges (802.11ac-HT20 Ch64, 5320MHz)

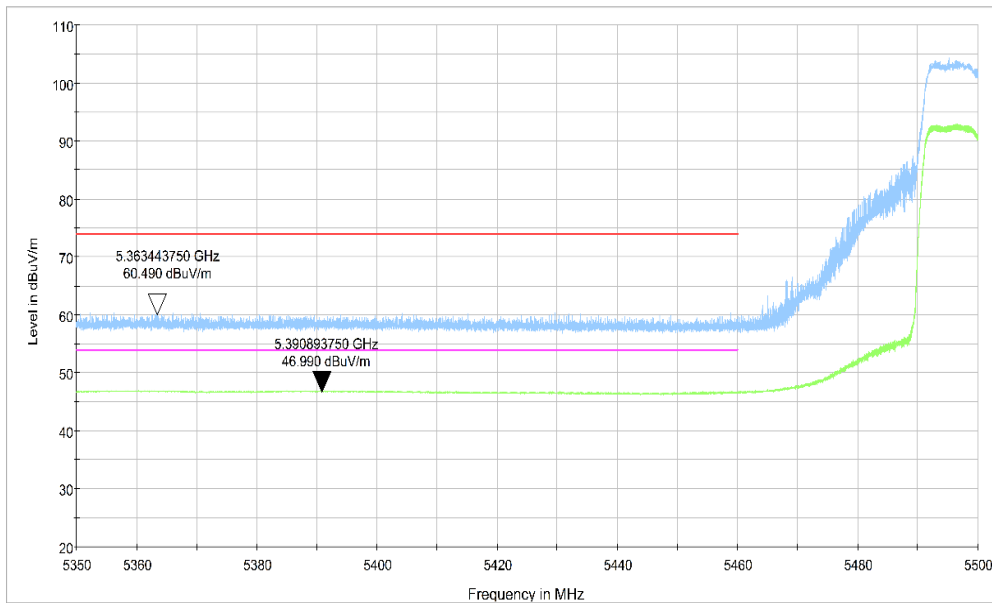


Fig.57 Band Edges (802.11ac-HT20 Ch100, 5500MHz)

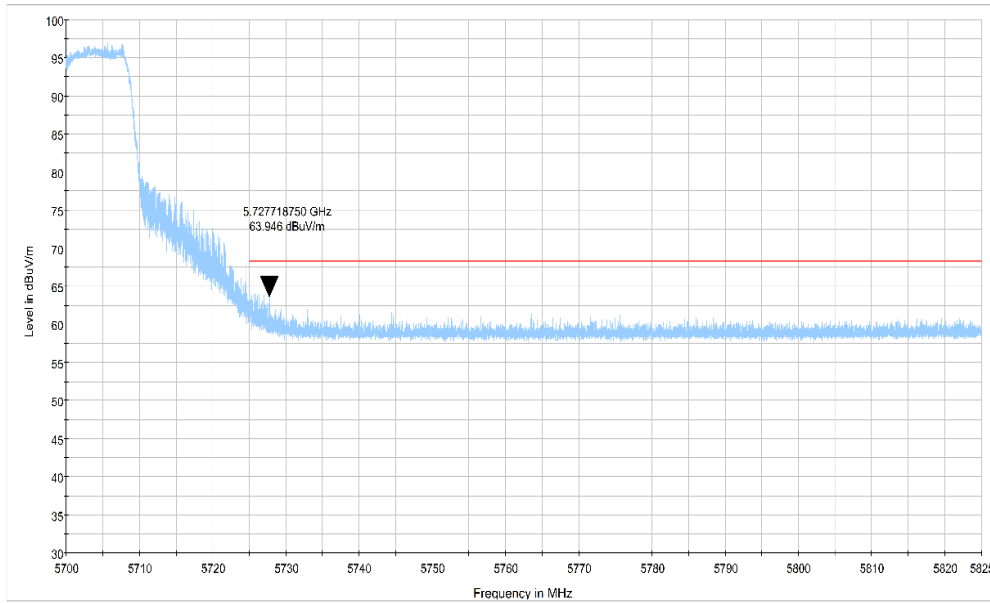


Fig.58 Band Edges (802.11ac-HT20 Ch140, 5700MHz)

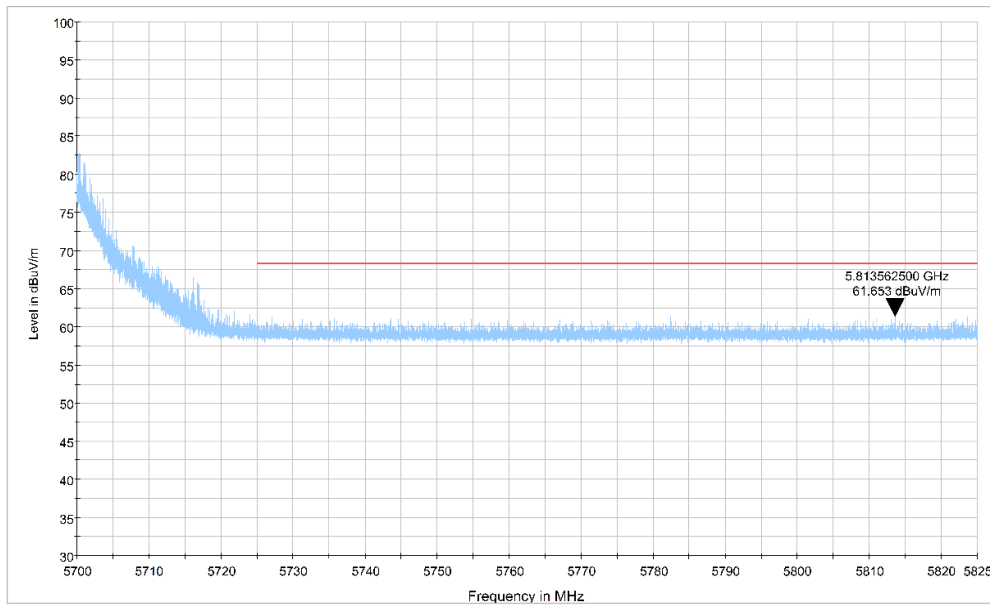


Fig.59 Band Edges (802.11ac-HT20 Ch136, 5680MHz)

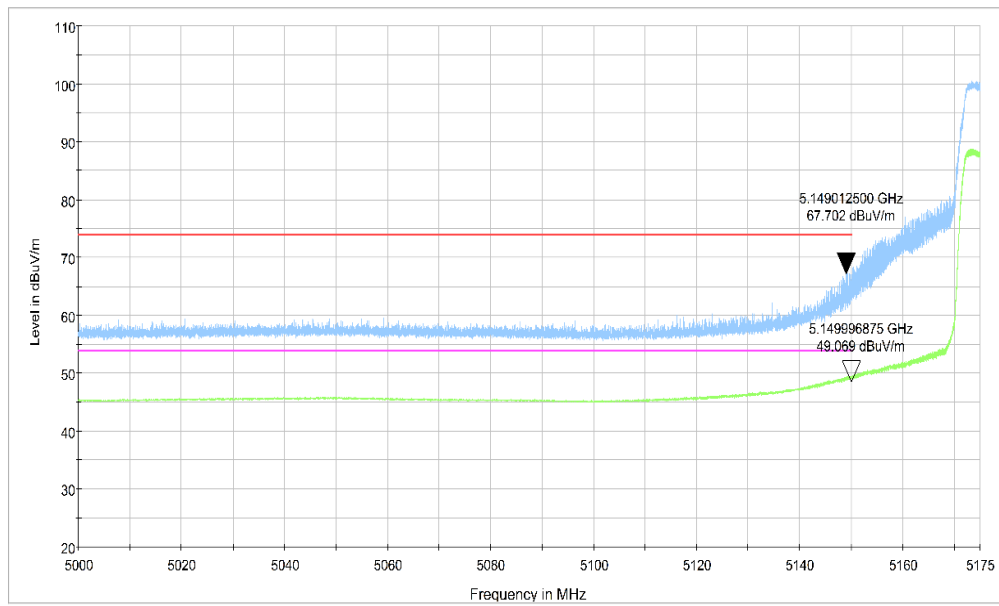


Fig.60 Band Edges (802.11ac-HT40 Ch38, 5190MHz)

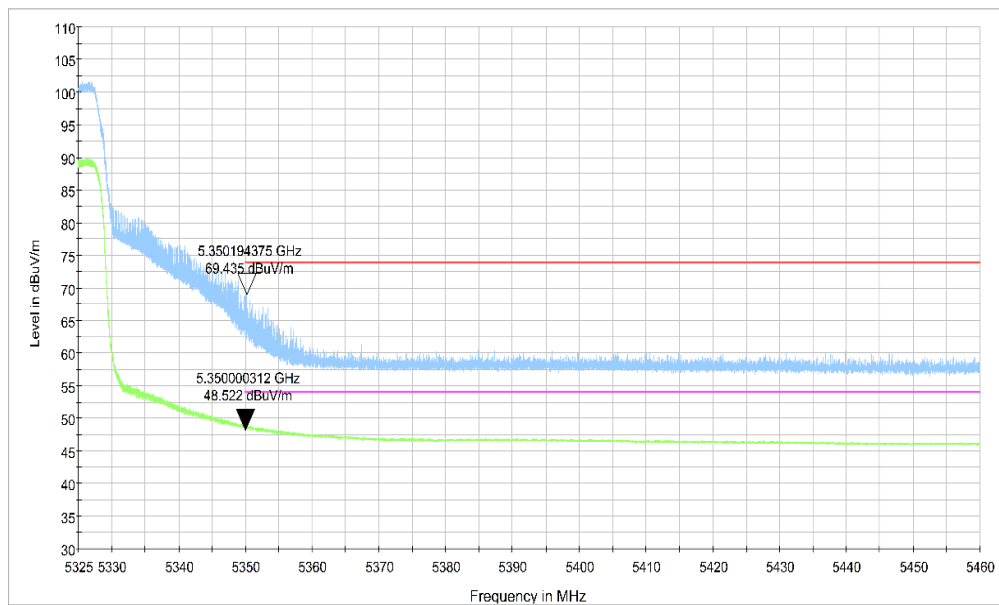


Fig.61 Band Edges (802.11ac-HT40 Ch62, 5310MHz)

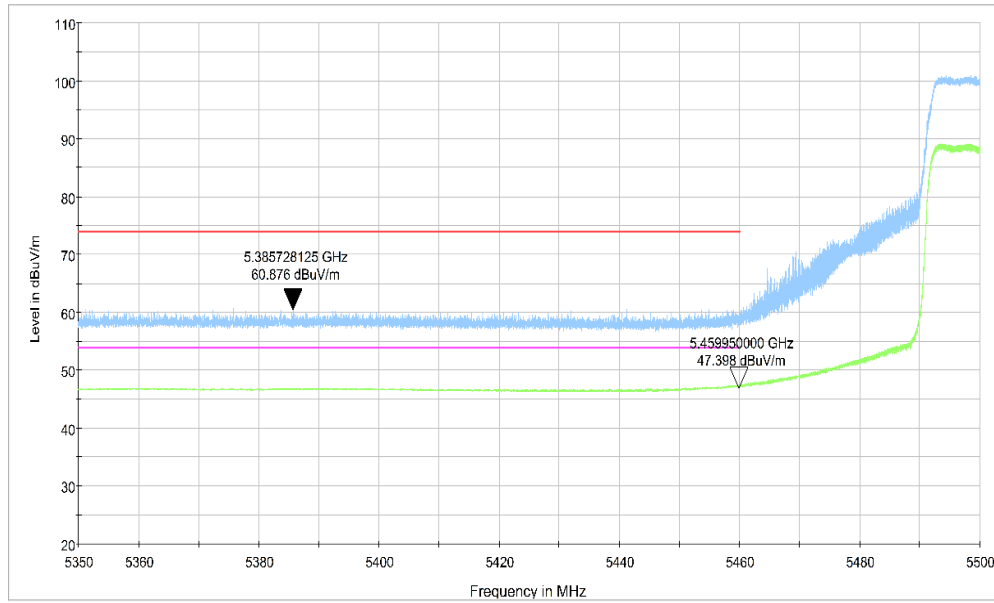


Fig.62 Band Edges (802.11ac-HT40 Ch102, 5510MHz)

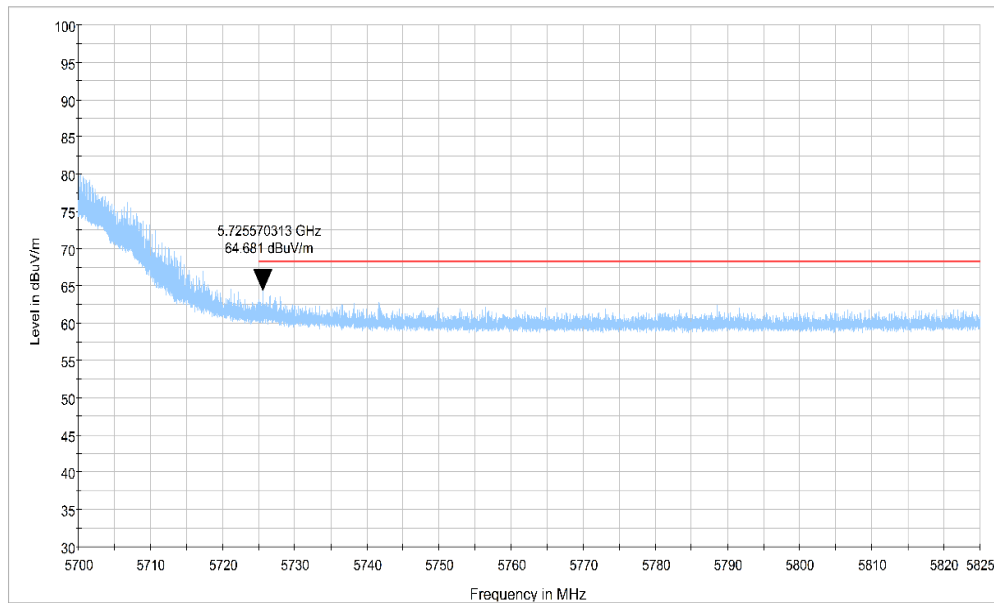


Fig.63 Band Edges (802.11ac-HT40 Ch134, 5670MHz)

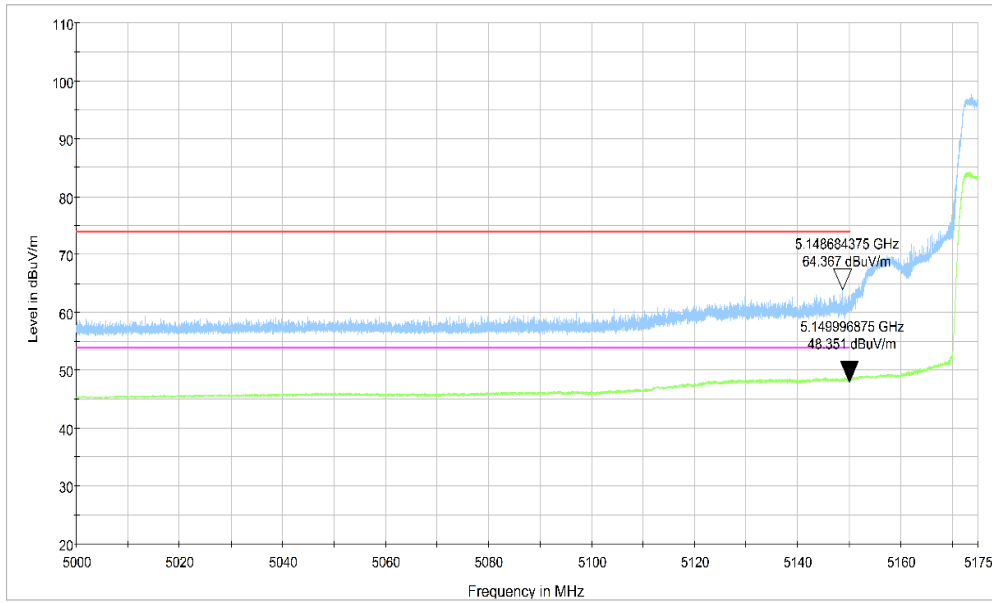


Fig.64 Band Edges (802.11ac-HT80 Ch42 , 5210MHz)

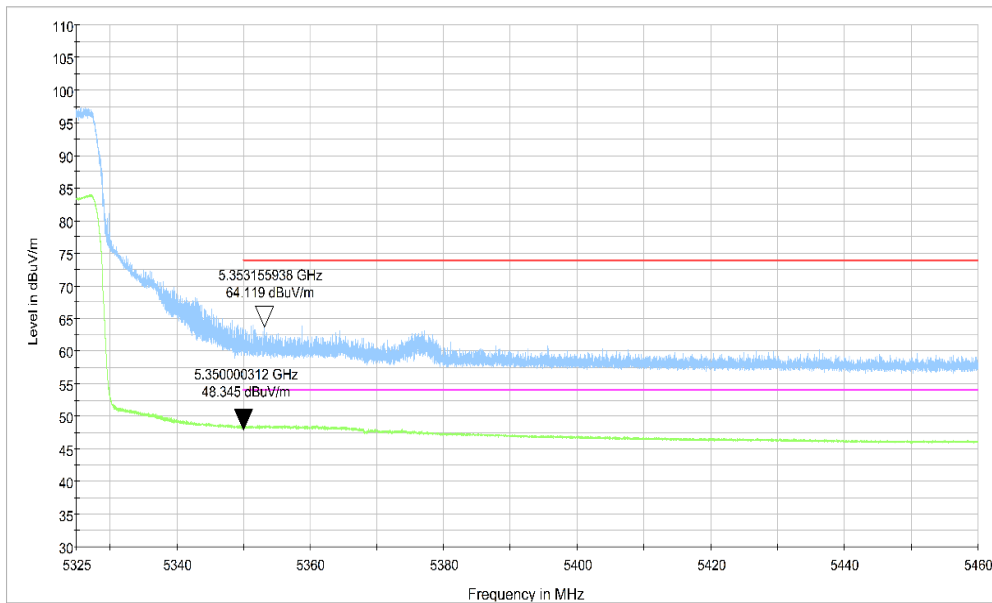


Fig.65 Band Edges (802.11ac-HT80 Ch58 , 5290MHz)

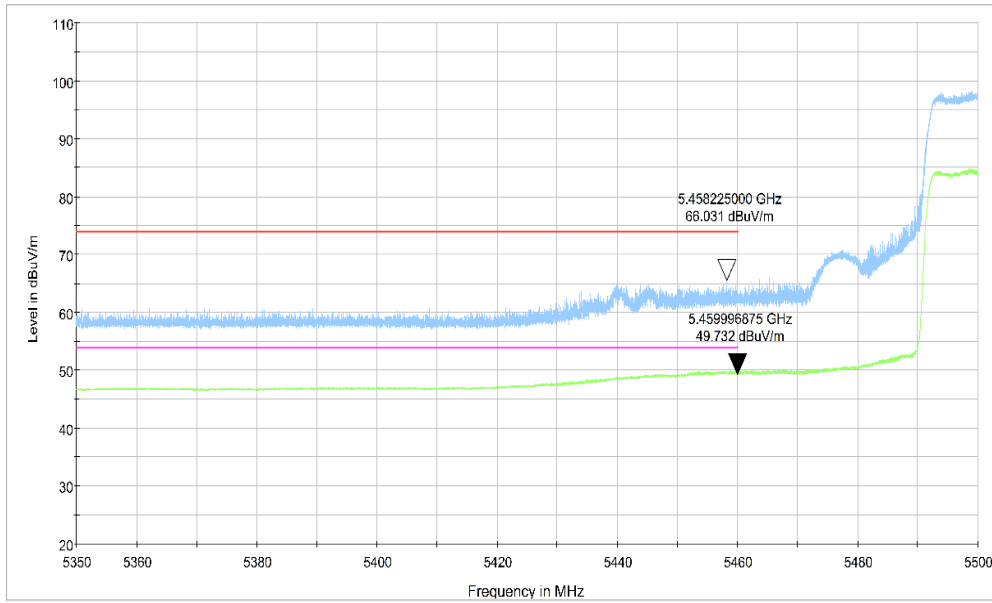


Fig.66 Band Edges (802.11ac-HT80 Ch106, 5530MHz)

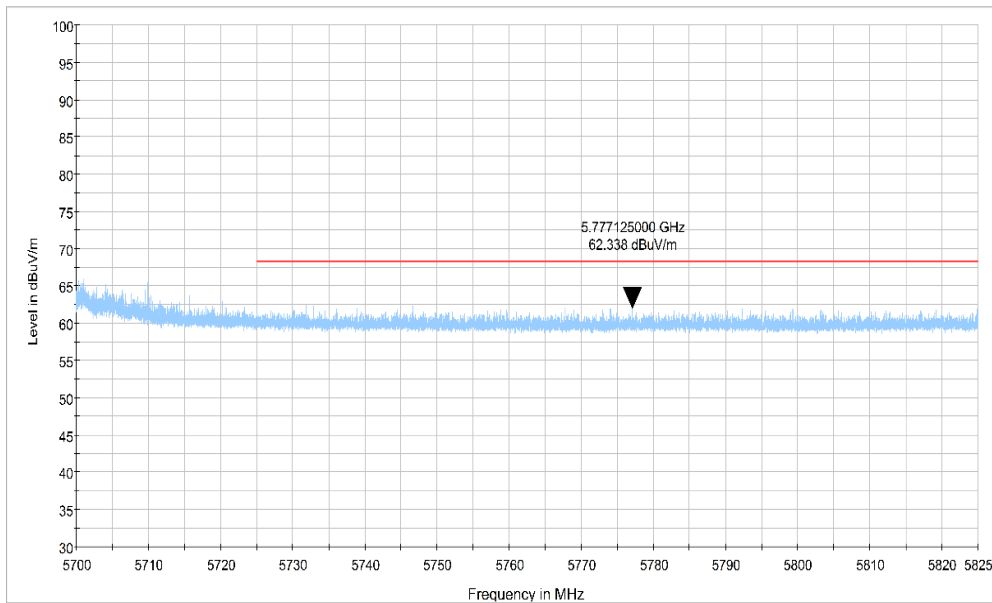


Fig.67 Band Edges (802.11ac-HT80 Ch122, 5610MHz)

A.6. Transmitter Spurious Emission

Measurement Limit:

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

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

Limit in restricted band:

Frequency (MHz)	Field strength(μ V/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

Frequency of emission (MHz)	Field strength(μ V/m)	Field strength(dBuV/m)	Measurement distance(m)
30-88	100	40	3
88-216	150	43.5	3
216-960	200	46	3
Above 960	500	54	3

The measurement is made according to ANSI C63.10-2013 and KDB 789033

Set up:

Tabletop devices shall be placed on a non-conducting platform with nominal top surface dimensions 1 m by 1.5 m. For emissions testing at or below 1 GHz, the table height shall be 80 cm above the reference ground plane. For emission measurements above 1 GHz, the table height shall be 1.5 m

The EUT and transmitting antenna shall be centered on the turntable.

Test Procedure

The EUT was placed on a non-conductive table. The measurement antenna was placed at a distance of 3 meters from the EUT. The test is carried out on both vertical and horizontal polarization and only maximization result of both polarizations is kept. During the test, the turntable is rotated 360° and the measurement antenna is moved from 1m to 4m to get the maximization result. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

The receiver references:

Frequency of emission (MHz)	RBW/VBW	Sweep Time(s)
30-1000	100kHz/300kHz	5
1000-4000	1MHz/3MHz	15
4000-18000	1MHz/3MHz	40
18000-26500	1MHz/3MHz	20

Spot check measurement results

802.11a mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11a	36(5180MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	144(5720MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P

802.11n-HT20 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n -HT20	64(5320MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	100(5500MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P

802.11n-HT40 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n HT40	38(5190MHz)	30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz ~ 40 GHz	---	P
	62(5310MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	102(5510MHz)	9kHz ~30 MHz	---	P
		30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz ~ 40 GHz	---	P

802.11ac-HT80 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11ac -HT80	42(5210MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P

Reference Measurement Results:
802.11a mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11a	36(5180MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	40(5200MHz)	9kHz ~30 MHz	---	P
		30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz ~ 40 GHz	---	P
	48(5240MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	52(5260MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	56(5280MHz)	9kHz ~30 MHz	---	P
		30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz ~ 40 GHz	---	P
	64(5320MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	100(5500MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	120(5600MHz)	9kHz ~30 MHz	---	P
		30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz ~ 40 GHz	---	P
	140(5700MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P

	144(5720MHz)	7 GHz ~ 18 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P

802.11n-HT20 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n -HT20	36(5180MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	40(5200MHz)	30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz ~ 40 GHz	---	P
	48(5240MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	52(5260MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	56(5280MHz)	9kHz ~30 MHz	---	P
		30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz ~ 40 GHz	---	P
	64(5320MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	100(5500MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	120(5600MHz)	9kHz ~30 MHz	---	P
		30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz ~ 40 GHz	---	P

	140(5700MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	144(5720MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P

802.11n-HT40 mode

Mode	Channel	Frequency Range	Test Results	Conclusion	
802.11n HT40	38(5190MHz)	30 MHz ~1 GHz	---	P	
		1 GHz ~ 3 GHz	---	P	
		3 GHz ~ 7 GHz	---	P	
		7 GHz ~ 18 GHz	---	P	
		18 GHz ~ 26.5 GHz	---	P	
		26.5 GHz ~ 40 GHz	---	P	
	46(5230MHz)	1 GHz ~ 3 GHz	---	P	
		3 GHz ~ 7 GHz	---	P	
		7 GHz ~ 18 GHz	---	P	
	54(5270MHz)	9kHz ~30 MHz	---	P	
		30 MHz ~1 GHz	---	P	
		1 GHz ~ 3 GHz	---	P	
		3 GHz ~ 7 GHz	---	P	
		7 GHz ~ 18 GHz	---	P	
		18 GHz ~ 26.5 GHz	---	P	
	62(5310MHz)	26.5 GHz ~ 40 GHz	---	P	
		1 GHz ~ 3 GHz	---	P	
		3 GHz ~ 7 GHz	---	P	
		7 GHz ~ 18 GHz	---	P	
		102(5510MHz)	9kHz ~30 MHz	---	P
			30 MHz ~1 GHz	---	P
	1 GHz ~ 3 GHz		---	P	
	3 GHz ~ 7 GHz		---	P	
	7 GHz ~ 18 GHz		---	P	
	18 GHz ~ 26.5 GHz		---	P	
	118(5590MHz)	26.5 GHz ~ 40 GHz	---	P	
		1 GHz ~ 3 GHz	---	P	
		3 GHz ~ 7 GHz	---	P	
		7 GHz ~ 18 GHz	---	P	
		134(5670MHz)	1 GHz ~ 3 GHz	---	P
			3 GHz ~ 7 GHz	---	P
	7 GHz ~ 18 GHz		---	P	
	142(5710MHz)	1 GHz ~ 3 GHz	---	P	

		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P

802.11ac-HT20 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11ac -HT20	36(5180MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	40(5200MHz)	30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz ~ 40 GHz	---	P
	48(5240MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	52(5260MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	56(5280MHz)	9kHz ~30 MHz	---	P
		30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
	64(5320MHz)	26.5 GHz ~ 40 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
	7 GHz ~ 18 GHz	---	P	
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
	100(5500MHz)	7 GHz ~ 18 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
	120(5600MHz)	7 GHz ~ 18 GHz	---	P
		9kHz ~30 MHz	---	P
		30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	140(5700MHz)	18 GHz ~ 26.5 GHz	---	P
		26.5 GHz ~ 40 GHz	---	P
		1 GHz ~ 3 GHz	---	P
	3 GHz ~ 7 GHz	---	P	

		7 GHz ~ 18 GHz	---	P
	144(5720MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P

802.11ac-HT40 mode

Mode	Channel	Frequency Range	Test Results	Conclusion	
802.11ac HT40	38(5190MHz)	30 MHz ~1 GHz	---	P	
		1 GHz ~ 3 GHz	---	P	
		3 GHz ~ 7 GHz	---	P	
		7 GHz ~ 18 GHz	---	P	
		18 GHz ~ 26.5 GHz	---	P	
		26.5 GHz ~ 40 GHz	---	P	
	46(5230MHz)	1 GHz ~ 3 GHz	---	P	
		3 GHz ~ 7 GHz	---	P	
		7 GHz ~ 18 GHz	---	P	
	54(5270MHz)	9kHz ~30 MHz	---	P	
		30 MHz ~1 GHz	---	P	
		1 GHz ~ 3 GHz	---	P	
		3 GHz ~ 7 GHz	---	P	
		7 GHz ~ 18 GHz	---	P	
		18 GHz ~ 26.5 GHz	---	P	
	62(5310MHz)	26.5 GHz ~ 40 GHz	---	P	
		1 GHz ~ 3 GHz	---	P	
		3 GHz ~ 7 GHz	---	P	
		7 GHz ~ 18 GHz	---	P	
		102(5510MHz)	9kHz ~30 MHz	---	P
			30 MHz ~1 GHz	---	P
	1 GHz ~ 3 GHz		---	P	
	3 GHz ~ 7 GHz		---	P	
	7 GHz ~ 18 GHz		---	P	
	18 GHz ~ 26.5 GHz		---	P	
	26.5 GHz ~ 40 GHz		---	P	
	118(5590MHz)	1 GHz ~ 3 GHz	---	P	
		3 GHz ~ 7 GHz	---	P	
		7 GHz ~ 18 GHz	---	P	
	134(5670MHz)	1 GHz ~ 3 GHz	---	P	
		3 GHz ~ 7 GHz	---	P	
		7 GHz ~ 18 GHz	---	P	
	142(5710MHz)	1 GHz ~ 3 GHz	---	P	
		3 GHz ~ 7 GHz	---	P	
		7 GHz ~ 18 GHz	---	P	

802.11ac-HT80 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11ac -HT80	42(5210MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	58(5290MHz)	9kHz ~30 MHz	---	P
		30 MHz ~1 GHz	---	P
		1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
		18 GHz ~ 26.5 GHz	---	P
		26.5 GHz ~ 40 GHz	---	P
	106(5530MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	122(5610MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P
	138(5690MHz)	1 GHz ~ 3 GHz	---	P
		3 GHz ~ 7 GHz	---	P
		7 GHz ~ 18 GHz	---	P

Conclusion: PASS

Note:

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

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

The measurement results are obtained as described below:

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

Spot check measurement results

AVERAGE Results:

802.11a

Channel 36

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5149.600	47.4	-23.3	34.3	36.40	54.0	6.6	V
5150.000	47.9	-23.3	34.3	36.89	54.0	6.1	V
10360.000	32.2	-29.7	37.6	24.24	54.0	21.8	H
15540.000	37.5	-24.5	40.1	21.88	54.0	16.5	H
16184.800	38.6	-23.3	41.0	20.82	54.0	15.4	V
17850.400	39.3	-22.5	41.5	20.25	54.0	14.7	H

Channel 144

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
4576.200	46.2	-24.0	34.0	36.18	54.0	7.8	V
4760.800	42.8	-23.2	34.1	31.90	54.0	11.2	V
11440.000	33.9	-29.5	38.2	25.14	54.0	20.1	H
16196.800	38.7	-23.2	41.0	20.92	54.0	15.3	V
17160.000	39.4	-23.0	42.0	20.32	54.0	14.6	V
17752.000	39.6	-22.3	41.5	20.35	54.0	14.4	H

802.11n-HT20

Channel 64

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5350.000	47.7	-22.3	34.3	35.61	54.0	6.3	V
5350.400	47.6	-22.3	34.3	35.54	54.0	6.4	V
10640.000	32.6	-29.3	37.9	24.07	54.0	21.4	H
15960.000	38.2	-23.8	40.7	21.35	54.0	15.8	V
16196.000	38.6	-23.2	41.0	20.79	54.0	15.4	H
17736.800	39.5	-22.3	41.6	20.24	54.0	14.5	V

Channel 100

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5457.600	46.0	-22.7	34.4	34.30	54.0	8.0	V
5459.800	45.9	-22.7	34.4	34.26	54.0	8.1	V
11000.000	33.8	-29.9	38.0	25.67	54.0	20.2	H
16154.400	38.5	-23.3	40.9	20.80	54.0	15.5	V
16500.000	39.1	-23.2	41.5	20.80	54.0	14.9	V
17734.400	39.7	-22.3	41.6	20.36	54.0	14.3	V

802.11n-HT40

Channel 38

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5149.800	47.6	-23.3	34.3	36.59	54.0	6.4	V
5150.000	47.6	-23.3	34.3	36.57	54.0	6.4	V
10380.000	32.3	-29.5	37.7	24.11	54.0	21.7	V
15570.400	37.9	-24.5	40.2	22.22	54.0	16.1	H
17744.800	39.6	-22.3	41.6	20.38	54.0	14.4	H
17951.200	39.6	-22.7	41.5	20.80	54.0	14.4	H

Channel 62

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5350.200	48.6	-22.3	34.3	36.53	54.0	5.4	V
5351.200	48.5	-22.3	34.3	36.42	54.0	5.5	V
10620.000	32.9	-29.2	37.8	24.22	54.0	21.1	V
15930.400	38.2	-23.9	40.6	21.43	54.0	15.8	V
17732.000	39.6	-22.3	41.6	20.26	54.0	14.4	H
17840.800	39.2	-22.5	41.5	20.16	54.0	14.8	V

Channel 102

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5459.600	47.4	-22.7	34.4	35.67	54.0	6.6	V
5460.000	47.3	-22.7	34.4	35.64	54.0	6.7	V
11020.000	34.1	-29.8	38.0	25.90	54.0	19.9	V
16192.800	38.7	-23.2	41.0	20.89	54.0	15.3	H
16530.400	38.9	-23.2	41.5	20.55	54.0	15.1	V
17757.600	39.6	-22.3	41.5	20.33	54.0	14.4	H

802.11ac-HT80
Channel 42

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5144.600	47.9	-23.3	34.3	36.85	54.0	6.1	V
5146.600	48.0	-23.3	34.3	36.98	54.0	6.0	V
11020.000	34.1	-29.8	37.9	25.98	54.0	19.9	V
15630.400	38.0	-24.5	40.4	22.20	54.0	16.0	H
17844.000	39.4	-22.5	41.3	20.62	54.0	14.6	H
17953.600	39.6	-22.7	41.3	21.01	54.0	14.4	H

PEAK Results:
802.11a
Channel 36

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5146.983	67.2	-23.3	34.3	56.26	74.0	6.8	H
5149.275	70.2	-23.3	34.3	59.21	74.0	3.8	H
10359.950	42.5	-29.7	37.6	34.50	68.3	25.8	H
15539.850	49.5	-24.5	40.1	33.83	74.0	24.5	V
16497.400	53.6	-23.2	41.5	35.26	68.3	14.7	V
17414.250	54.3	-23.1	41.7	35.68	68.3	14.0	H

Channel 144

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5682.000	58.6	-22.9	34.7	46.73	68.3	9.7	H
5770.000	58.4	-22.9	34.9	46.43	68.3	9.9	H
11440.150	44.4	-29.5	38.2	35.73	74.0	29.6	V
16920.350	53.8	-23.0	42.1	34.75	68.3	14.5	H
17160.150	50.8	-23.0	42.0	31.80	68.3	17.5	V
17392.800	53.2	-23.0	41.7	34.51	68.3	15.1	H

802.11n-HT20

Channel 64

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5351.123	67.3	-22.3	34.3	55.29	74.0	6.7	H
5351.717	68.0	-22.3	34.3	55.96	74.0	6.0	H
10639.900	42.7	-29.3	37.9	34.19	74.0	31.3	V
15960.050	50.2	-23.8	40.7	33.35	74.0	23.8	H
16359.350	52.5	-23.1	41.3	34.31	68.3	15.8	V
16910.450	53.4	-23.0	42.1	34.29	68.3	14.9	H

Channel 100

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5456.635	62.0	-22.7	34.4	50.32	74.0	12.0	V
5458.195	62.0	-22.7	34.4	50.32	74.0	12.0	V
11000.150	44.8	-29.9	38.0	36.63	74.0	29.2	H
16319.200	53.2	-23.1	41.2	35.06	68.3	15.2	H
16500.150	50.0	-23.2	41.5	31.70	68.3	18.3	H
17417.550	53.3	-23.1	41.7	34.66	68.3	15.0	H

802.11n-HT40

Channel 38

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5148.610	69.3	-23.3	34.3	58.34	74.0	4.7	H
5149.713	67.8	-23.3	34.3	56.82	74.0	6.2	V
10379.750	44.5	-29.5	37.7	36.30	68.3	23.8	H
15570.100	50.0	-24.5	40.2	34.28	74.0	24.0	H
16903.850	53.6	-23.0	42.1	34.58	68.3	14.7	V
17635.900	54.0	-22.0	41.6	34.41	68.3	14.3	V

Channel 62

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5350.097	68.5	-22.3	34.3	56.46	74.0	5.5	H
5350.272	68.1	-22.3	34.3	56.05	74.0	5.9	H
10620.100	43.6	-29.2	37.8	34.90	74.0	30.5	H
15929.800	49.1	-23.9	40.6	32.39	74.0	24.9	V
16917.050	53.8	-23.0	42.1	34.74	68.3	14.5	V
17494.000	54.0	-22.9	41.6	35.29	68.3	14.3	H

Channel 102

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5485.720	64.6	-22.7	34.4	52.87	74.0	9.4	V
5459.605	63.8	-22.7	34.4	52.08	74.0	10.2	V
11019.950	44.5	-29.8	38.0	36.30	68.3	23.8	V
16529.850	50.4	-23.2	41.5	32.06	68.3	17.9	V
16729.500	54.0	-23.1	41.8	35.25	68.3	14.3	V
17431.300	53.9	-23.1	41.7	35.28	68.3	14.4	V

802.11ac-HT80

Channel 42

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5144.445	64.7	-23.3	34.3	53.65	74.0	9.3	V
5149.940	64.8	-23.3	34.3	53.78	74.0	9.2	H
10419.900	43.4	-29.3	37.5	35.20	68.3	24.9	V
15630.050	48.9	-24.5	40.4	33.07	74.0	25.1	V
16656.900	53.4	-23.2	41.5	35.12	68.3	14.9	V
17226.150	53.8	-22.9	41.5	35.21	68.3	14.5	V

Reference measurement results
AVERAGE Results:
802.11a
Channel 36

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5149.800	46.9	-19.0	34.2	31.77	54.0	7.1	H
5150.000	47.1	-19.0	34.2	31.91	54.0	6.9	H
11724.800	37.1	-25.0	38.5	23.67	54.0	16.9	H
15540.000	38.9	-21.5	40.1	20.28	54.0	15.1	H
17775.200	40.1	-20.4	40.5	20.01	54.0	13.9	H
17843.200	40.1	-20.5	40.4	20.16	54.0	13.9	H

Channel 40

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
4159.875	47.6	-19.4	33.4	33.55	54.0	6.4	V
4727.375	46.0	-19.1	33.9	31.14	54.0	8.0	V
11695.200	37.1	-25.0	38.5	23.56	54.0	16.9	H
15600.000	38.8	-21.8	40.2	20.31	54.0	15.2	V
17776.000	40.3	-20.4	40.5	20.13	54.0	13.7	H
17829.600	40.1	-20.4	40.4	20.10	54.0	13.9	H

Channel 48

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
4191.875	47.6	-19.5	33.4	33.66	54.0	6.4	V
4767.125	46.3	-18.8	33.9	31.15	54.0	7.7	V
11693.600	37.1	-25.0	38.5	23.62	54.0	16.9	H
15720.000	39.2	-21.1	40.4	19.98	54.0	14.8	H
17784.000	40.2	-20.3	40.5	20.09	54.0	13.8	V
17836.800	40.3	-20.4	40.4	20.26	54.0	13.7	H

Channel 52

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
4207.875	47.1	-19.4	33.5	33.10	54.0	6.9	V
4772.250	46.1	-18.8	33.9	31.05	54.0	7.9	H
11703.200	37.3	-25.0	38.5	23.76	54.0	16.7	H
15780.000	39.0	-21.4	40.4	19.96	54.0	15.0	V
17788.000	40.3	-20.3	40.5	20.13	54.0	13.7	H
17830.400	40.3	-20.4	40.4	20.22	54.0	13.7	V

Channel 56

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
4224.000	46.2	-19.4	33.5	32.14	54.0	7.8	V
4792.375	46.3	-18.9	33.9	31.31	54.0	7.7	V
11691.200	37.3	-25.0	38.5	23.81	54.0	16.7	V
15840.000	39.4	-21.3	40.5	20.23	54.0	14.6	H
17775.200	40.3	-20.4	40.5	20.19	54.0	13.7	H
17836.800	40.2	-20.4	40.4	20.23	54.0	13.8	V

Channel 64

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5350.000	47.0	-18.5	34.4	31.23	54.0	7.0	H
5351.000	46.7	-18.6	34.4	30.94	54.0	7.3	H
10640.000	35.2	-26.8	37.9	24.07	54.0	18.8	V
15960.000	39.3	-21.5	40.7	20.20	54.0	14.7	V
17775.200	40.3	-20.4	40.5	20.14	54.0	13.7	H
17830.400	40.3	-20.4	40.4	20.26	54.0	13.7	V

Channel 100

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5458.875	46.0	-18.8	34.5	30.34	54.0	8.0	H
5460.000	46.0	-18.8	34.5	30.35	54.0	8.0	H
10998.400	35.9	-27.0	38.0	24.84	54.0	18.1	H
16177.600	39.6	-21.2	40.9	19.89	54.0	14.4	V
17768.800	40.3	-20.4	40.5	20.19	54.0	13.7	V
17809.600	40.2	-20.3	40.5	20.07	54.0	13.8	V

Channel 120

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5112.375	45.9	-19.3	34.1	31.02	54.0	8.1	V
5127.500	46.1	-19.2	34.1	31.14	54.0	7.9	V
11200.000	36.4	-27.3	38.1	25.62	54.0	17.6	V
16184.800	39.8	-21.2	40.9	20.11	54.0	14.2	V
17766.400	40.3	-20.4	40.5	20.22	54.0	13.7	V
17811.200	40.2	-20.3	40.4	20.08	54.0	13.8	H

Channel 140

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5353.000	44.9	-18.6	34.4	29.15	54.0	9.1	H
5383.750	45.0	-18.7	34.4	29.29	54.0	9.0	V
11400.000	36.2	-26.3	38.2	24.36	54.0	17.8	V
16144.000	39.9	-21.2	40.8	20.27	54.0	14.1	V
17768.800	40.2	-20.4	40.5	20.12	54.0	13.8	H
17818.400	40.2	-20.3	40.4	20.12	54.0	13.8	V

Channel 144

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
4513.125	44.0	-18.8	33.8	29.05	54.0	10.0	V
4576.000	50.3	-19.2	33.8	35.63	54.0	3.7	H
11440.000	36.4	-26.0	38.2	24.18	54.0	17.6	H
16186.400	39.8	-21.2	40.9	20.09	54.0	14.2	H
17763.200	40.2	-20.4	40.5	20.16	54.0	13.8	H
17806.400	40.3	-20.3	40.5	20.12	54.0	13.7	V

802.11n-HT20

Channel 36

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
5149.750	44.9	-19.0	34.2	29.77	54.0	9.1	H
5150.000	45.1	-19.0	34.2	29.96	54.0	8.9	H
11693.600	37.1	-25.0	38.5	23.59	54.0	16.9	V
15540.000	38.9	-21.5	40.1	20.25	54.0	15.1	V
17788.000	40.2	-20.3	40.5	20.06	54.0	13.8	H
17830.400	40.2	-20.4	40.4	20.17	54.0	13.8	H

Channel 40

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
4159.875	47.0	-19.4	33.4	32.99	54.0	7.0	H
4727.250	45.7	-19.1	33.9	30.90	54.0	8.3	V
11693.600	37.2	-25.0	38.5	23.65	54.0	16.8	V
15600.000	38.8	-21.8	40.2	20.33	54.0	15.2	V
17788.000	40.2	-20.3	40.5	20.08	54.0	13.8	H
17843.200	40.1	-20.5	40.4	20.09	54.0	13.9	H