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WIFI 5GHz Template: Release October 03rd, 2016

# TEST REPORT

N°: 145064-694081D

Version : 02

## Subject

Radio spectrum matters  
tests according to standards:  
47 CFR Part 15.407 (RF Test Only) 

## Issued to

**SAGEMCOM BROADBAND SAS**  
250 Route de l' Empereur  
92500 – RUEIL MALMAISON  
FRANCE

## Apparatus under test

 Product **DGCI384 UHD Alt US**  
 Trade mark **SAGEMCOM**  
 Manufacturer **SAGEMCOM**  
 Model under test **TheBox (253697282)**  
 Serial number **616400107098**  
 FCC ID **VW3DGCI384**

## Test date

: November 7, 2016 to December 8, 2016

## Test location

Fontenay Aux Roses & Ecuelles

## Composition of document

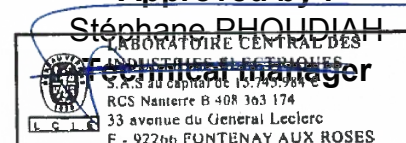
279 pages

## Document issued on

January 19, 2017

**Written by :**  
Mathieu CERISIER  
**Tests operator**

**Approved by :**



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01	January 9, 2017	Mathieu CERISIER	Creation of the document
02	January 19, 2017	Arnaud FAYETTE	Update : Band Edge change for moda a and NHT20 (5725MHz-5850MHz)



## SUMMARY

1.	TEST PROGRAM .....	4
2.	EQUIPMENT UNDER TEST: CONFIGURATION (DECLARED BY PROVIDER) .....	5
3.	OCCUPIED BANDWIDTH .....	20
4.	CARRIER FREQUENCIES .....	30
5.	26DB EMISSION BANDWIDTH .....	42
6.	6DB EMISSION BANDWIDTH .....	52
7.	DUTY CYCLE .....	58
8.	MAXIMUM CONDUCTED OUTPUT POWER, MAXIMUM POWER SPECTRAL DENSITY, MAXIMUM EIRP, MAXIMUM EIRP SPECTRAL DENSITY .....	62
9.	TRANSMIT POWER CONTROL .....	172
10.	AC POWER LINE CONDUCTED EMISSIONS .....	219
11.	UNWANTED EMISSIONS & UNDESIRABLE EMISSION .....	224
12.	UNCERTAINTIES CHART .....	279

## 1. TEST PROGRAM

### References

- 47 CFR Part 15.407
- KDB 789033 D02 General U-NII Tests Procedures New Rules v01r02
- KDB 662911 D01 Multiple Transmitter Output v02r01
- ANSI C63.10-2013

### Radio requirement:

Clause (47CFR Part 15.407) Test Description	Test result - Comments			
Occupied Bandwidth <a href="#">ℱ</a>	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input type="checkbox"/> NA	<input type="checkbox"/> NP(1)
26dB Bandwidth <a href="#">ℱ</a>	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input type="checkbox"/> NA(2)	<input type="checkbox"/> NP(1)
6dB Bandwidth <a href="#">ℱ</a>	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input type="checkbox"/> NA(3)	<input type="checkbox"/> NP(1)
Duty Cycle <a href="#">ℱ</a>	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input type="checkbox"/> NA	<input type="checkbox"/> NP(1)
EIRP <a href="#">ℱ</a>	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input type="checkbox"/> NA	<input type="checkbox"/> NP(1)
Maximum Conducted Output Power <a href="#">ℱ</a>	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input type="checkbox"/> NA	<input type="checkbox"/> NP(1)
Power Spectral Density <a href="#">ℱ</a>	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input type="checkbox"/> NA	<input type="checkbox"/> NP(1)
Transmit Power Control <a href="#">ℱ</a>	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input type="checkbox"/> NA(4)	<input type="checkbox"/> NP(1)
AC Power Line Conducted Emission <a href="#">ℱ</a>	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input type="checkbox"/> NA(5)	<input type="checkbox"/> NP(1)
Unwanted Emissions & Undesirable Emission <a href="#">ℱ</a>	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input type="checkbox"/> NA	<input type="checkbox"/> NP(1)
Frequency Stability <a href="#">ℱ</a>	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input type="checkbox"/> NA	<input type="checkbox"/> NP(1)

This table is a summary of test report, see conclusion of each clause of this test report for detail.

- (1): Limited program  
 (2): EUT only operates outside the 5725MHz-5850MHz band  
 (3): EUT only operates inside the 5725MHz-5850MHz band  
 (4): EIRP below 27dBm or EUT only operates inside 5150MHz-5250MHz or/and 5725MHz-5850MHz bands  
 (5): EUT not directly or indirectly connected to the AC Power Public Network

**2. EQUIPMENT UNDER TEST: CONFIGURATION (DECLARED BY PROVIDER)**

**2.1. HARDWARE IDENTIFICATION (EUT AND AUXILIARIES):**

Equipment under test (EUT):  
**SAGEMCOM TheBox (253697282)**

Serial number : **616400107098**



Equipment Under Test



Equipment Under Test

**Inputs/outputs - Cable:**

Access	Type	Length used (m)	Declared <3m	Shielded	Under test	Comments
1	Power supply	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	-
2	Ethernet	1.5	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	-

**Auxiliary equipment used during test:**

Type	Reference	Sn	Comments
Laptop	-	-	Use to set the EUT
Power supply°1	NBS60C120500M2	16366C25200017	P/N:191363252-xx
Power supply°2	LPL-C060120500ZS	1637215590020	P/N:191363559-XX
Power supply°3	MSA-Z5000IS12.0-60A-P	H16386E6950010	P/N:191363695-XX
Power supply°4	A15-060P1A	16413K72800092	P/N:191363728



L C I E

**Equipment information:**

Type:	<b>WIFI</b>			
Frequency band:	<input checked="" type="checkbox"/> 5150MHz-5250MHz	<input checked="" type="checkbox"/> 5250MHz-5350MHz	<input checked="" type="checkbox"/> 5470MHz-5725MHz	
	<input checked="" type="checkbox"/> 5725MHz-5850MHz			
Standard:	<input checked="" type="checkbox"/> 802.11a	<input checked="" type="checkbox"/> 802.11n HT20	<input checked="" type="checkbox"/> 802.11n HT40	
	<input checked="" type="checkbox"/> 802.11ac VHT20	<input checked="" type="checkbox"/> 802.11ac VHT40	<input checked="" type="checkbox"/> 802.11ac VHT80	
	<input type="checkbox"/> 802.11ac VHT160			
Spectrum Modulation:	<input checked="" type="checkbox"/> OFDM			
Channel bandwidth:	<input checked="" type="checkbox"/> 20MHz	<input checked="" type="checkbox"/> 40MHz	<input checked="" type="checkbox"/> 80MHz	<input type="checkbox"/> 160MHz
Antenna Type:	<input checked="" type="checkbox"/> Integral	<input type="checkbox"/> External	<input type="checkbox"/> Dedicated	
Antenna connector:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Temporary for test	
Transmit chains:	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input checked="" type="checkbox"/> 4
	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 8
TPC:	<input checked="" type="checkbox"/> Yes		<input type="checkbox"/> No	
Receiver chains:	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input checked="" type="checkbox"/> 4
	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 8
Type of equipment:	<input checked="" type="checkbox"/> Stand-alone	<input type="checkbox"/> Plug-in	<input type="checkbox"/> Combined	
Operating temperature range:	Tmin:	<input type="checkbox"/> -20°C	<input checked="" type="checkbox"/> 0°C	<input type="checkbox"/> X °C
	Tnom:	20°C		
	Tmax:	<input type="checkbox"/> 35°C	<input type="checkbox"/> 55°C	<input checked="" type="checkbox"/> 45 °C
Type of power source:	<input checked="" type="checkbox"/> AC power supply	<input type="checkbox"/> DC power supply	<input type="checkbox"/> Battery Battery Type	
Operating voltage range:	Vnom:	<input checked="" type="checkbox"/> 120V/60Hz	<input type="checkbox"/> X Vdc	
Mode:	<input checked="" type="checkbox"/> Master	<input type="checkbox"/> Slave with radar detection	<input type="checkbox"/> Slave without radar detection	
	<input checked="" type="checkbox"/> Bridge		<input type="checkbox"/> Mesh	
Fixed outdoor P to P/M application:	<input type="checkbox"/> Yes		<input checked="" type="checkbox"/> No	
System architectures:	<input checked="" type="checkbox"/> IP based		<input type="checkbox"/> Frame based	
Time require for EUT to complete its power cycle on	- s			
User access restriction:	<input checked="" type="checkbox"/> Yes (The manufacturer declares that information regarding the parameters of the detected Radar Waveforms is not available to the end user)		<input type="checkbox"/> No	



<b>Antenna Characteristic</b>			
<b>Antenna assembly</b>	<b>Gain (dBi)</b>	<b>Frequency Band (MHz)</b>	<b>Impedance(<math>\Omega</math>)</b>
1	2dBi (worst case and assumed to be equal)	5180-5825	50
2	2dBi (worst case and assumed to be equal)	5180-5825	50
3	2dBi (worst case and assumed to be equal)	5180-5825	50
4	2dBi (worst case and assumed to be equal)	5180-5825	50
Accumulated	8dBi for correlated signals as defined in KDB662911, page 6 F.2.d.i overall product positions in elevation and angle	5180-5825	50

Note: Calculated according to KDB 662911 D01 Multiple Transmitter Output v02r01 F) 2) d) (i). All antennas can transmit simultaneously.





L C I E

CHANNEL PLAN		
802.11a / 802.11n HT20/ 802.11ac VHT20		
Channel	Frequency (MHz)	Available Channel
C1=36	5180	<input checked="" type="checkbox"/>
C2=40	5200	<input checked="" type="checkbox"/>
44	5220	<input checked="" type="checkbox"/>
C3=48	5240	<input checked="" type="checkbox"/>
C4=52	5260	<input checked="" type="checkbox"/>
56	5280	<input checked="" type="checkbox"/>
C5=60	5300	<input checked="" type="checkbox"/>
C6=64	5320	<input checked="" type="checkbox"/>
C7=100	5500	<input checked="" type="checkbox"/>
104	5520	<input checked="" type="checkbox"/>
108	5540	<input checked="" type="checkbox"/>
112	5560	<input checked="" type="checkbox"/>
C8=116	5580	<input checked="" type="checkbox"/>
120	5600	<input checked="" type="checkbox"/>
124	5620	<input checked="" type="checkbox"/>
128	5640	<input checked="" type="checkbox"/>
132	5660	<input checked="" type="checkbox"/>
136	5680	<input checked="" type="checkbox"/>
C9=140	5700	<input checked="" type="checkbox"/>
C10=144	5720	<input checked="" type="checkbox"/>
C11=149	5745	<input checked="" type="checkbox"/>
153	5765	<input checked="" type="checkbox"/>
C12=157	5785	<input checked="" type="checkbox"/>
161	5805	<input checked="" type="checkbox"/>
C13=165	5825	<input checked="" type="checkbox"/>



L C I E

CHANNEL PLAN		
802.11n HT40/ 802.11ac VHT40		
Channel	Frequency (MHz)	Available Channel
C14=36+40	5190	<input checked="" type="checkbox"/>
C15=44+48	5230	<input checked="" type="checkbox"/>
C16=52+56	5270	<input checked="" type="checkbox"/>
C17=60+64	5310	<input checked="" type="checkbox"/>
C18=100+104	5510	<input checked="" type="checkbox"/>
C19=108+112	5550	<input checked="" type="checkbox"/>
116+120	5590	<input checked="" type="checkbox"/>
124+128	5630	<input checked="" type="checkbox"/>
C20=132+136	5670	<input checked="" type="checkbox"/>
C21=140+144	5710	<input checked="" type="checkbox"/>
C22=149+153	5755	<input checked="" type="checkbox"/>
C23=157+161	5795	<input checked="" type="checkbox"/>

CHANNEL PLAN		
802.11ac VHT80		
Channel	Frequency (MHz)	Available Channel
C24=36+40+44+48	5210	<input checked="" type="checkbox"/>
C25=52+56+60+64	5290	<input checked="" type="checkbox"/>
C26=100+104+108+112	5530	<input checked="" type="checkbox"/>
C27=116+120+124+128	5610	<input checked="" type="checkbox"/>
C28=132+136+140+144	5690	<input checked="" type="checkbox"/>
C29=149+153+157+161	5775	<input checked="" type="checkbox"/>

No DFS Channel
DFS Channel
Weather DFS Channel



L C I E

DATA RATE		
802.11a		
Data Rate (Mbps)	Modulation Type	Modulation Worst Case
6	BPSK	<input checked="" type="checkbox"/>
9	BPSK	<input type="checkbox"/>
12	QPSK	<input type="checkbox"/>
18	QPSK	<input type="checkbox"/>
24	16-QAM	<input type="checkbox"/>
36	16-QAM	<input type="checkbox"/>
48	64-QAM	<input type="checkbox"/>
54	64-QAM	<input type="checkbox"/>



L C I E

DATA RATE									
802.11n HT20									
Available for EUT	MCS Index	Spatial streams	Modulation				Data Rate (Mbps)		Worst Case Modulation
							(GI = 800ns)	(GI = 400ns)	
<input checked="" type="checkbox"/>	0	1	BPSK				6.5	7.2	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	1	1	QPSK				13	14.4	<input type="checkbox"/>
<input checked="" type="checkbox"/>	2	1	QPSK				19.5	21.7	<input type="checkbox"/>
<input checked="" type="checkbox"/>	3	1	16-QAM				26	28.9	<input type="checkbox"/>
<input checked="" type="checkbox"/>	4	1	16-QAM				39	43.3	<input type="checkbox"/>
<input checked="" type="checkbox"/>	5	1	64-QAM				52	57.8	<input type="checkbox"/>
<input checked="" type="checkbox"/>	6	1	64-QAM				58.5	65	<input type="checkbox"/>
<input checked="" type="checkbox"/>	7	1	64-QAM				65	72.2	<input type="checkbox"/>
<input checked="" type="checkbox"/>	8	2	BPSK				13	14.4	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	9	2	QPSK				26	28.9	<input type="checkbox"/>
<input checked="" type="checkbox"/>	10	2	QPSK				39	43.3	<input type="checkbox"/>
<input checked="" type="checkbox"/>	11	2	16-QAM				52	57.8	<input type="checkbox"/>
<input checked="" type="checkbox"/>	12	2	16-QAM				78	86.7	<input type="checkbox"/>
<input checked="" type="checkbox"/>	13	2	64-QAM				104	115.6	<input type="checkbox"/>
<input checked="" type="checkbox"/>	14	2	64-QAM				117	130.3	<input type="checkbox"/>
<input checked="" type="checkbox"/>	15	2	64-QAM				130	144.4	<input type="checkbox"/>
<input checked="" type="checkbox"/>	16	3	BPSK				19.5	21.7	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	17	3	QPSK				39	43.3	<input type="checkbox"/>
<input checked="" type="checkbox"/>	18	3	QPSK				58.5	65	<input type="checkbox"/>
<input checked="" type="checkbox"/>	19	3	16-QAM				78	86.7	<input type="checkbox"/>
<input checked="" type="checkbox"/>	20	3	16-QAM				117	130	<input type="checkbox"/>
<input checked="" type="checkbox"/>	21	3	64-QAM				156	173.3	<input type="checkbox"/>
<input checked="" type="checkbox"/>	22	3	64-QAM				175.5	195	<input type="checkbox"/>
<input checked="" type="checkbox"/>	23	3	64-QAM				195	216.7	<input type="checkbox"/>
<input checked="" type="checkbox"/>	24	4	BPSK				26	28.9	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	25	4	QPSK				52	57.8	<input type="checkbox"/>
<input checked="" type="checkbox"/>	26	4	QPSK				78	86.7	<input type="checkbox"/>
<input checked="" type="checkbox"/>	27	4	16-QAM				104	115.6	<input type="checkbox"/>
<input checked="" type="checkbox"/>	28	4	16-QAM				156	173.3	<input type="checkbox"/>
<input checked="" type="checkbox"/>	29	4	64-QAM				208	231.1	<input type="checkbox"/>
<input checked="" type="checkbox"/>	30	4	64-QAM				234	260	<input type="checkbox"/>
<input checked="" type="checkbox"/>	31	4	64-QAM				260	288.9	<input type="checkbox"/>
<input type="checkbox"/>	32	1	BPSK	-	-	-	-	<input type="checkbox"/>	
<input type="checkbox"/>	33	2	16-QAM	QPSK	-	-	39	43.3	<input type="checkbox"/>
<input type="checkbox"/>	34	2	64-QAM	QPSK	-	-	52	57.8	<input type="checkbox"/>
<input type="checkbox"/>	35	2	64-QAM	16-QAM	-	-	65	72.2	<input type="checkbox"/>
<input type="checkbox"/>	36	2	16-QAM	QPSK	-	-	58.5	65	<input type="checkbox"/>
<input type="checkbox"/>	37	2	64-QAM	QPSK	-	-	78	86.7	<input type="checkbox"/>
<input type="checkbox"/>	38	2	64-QAM	16-QAM	-	-	97.5	108.3	<input type="checkbox"/>
<input type="checkbox"/>	39	3	16-QAM	QPSK	QPSK	-	52	57.8	<input type="checkbox"/>
<input type="checkbox"/>	40	3	16-QAM	16-QAM	QPSK	-	65	72.2	<input type="checkbox"/>
<input type="checkbox"/>	41	3	64-QAM	QPSK	QPSK	-	65	72.2	<input type="checkbox"/>
<input type="checkbox"/>	42	3	64-QAM	16-QAM	QPSK	-	78	86.7	<input type="checkbox"/>
<input type="checkbox"/>	43	3	64-QAM	16-QAM	16-QAM	-	91	101.1	<input type="checkbox"/>
<input type="checkbox"/>	44	3	64-QAM	64-QAM	QPSK	-	91	101.1	<input type="checkbox"/>
<input type="checkbox"/>	45	3	64-QAM	64-QAM	16-QAM	-	104	115.6	<input type="checkbox"/>
<input type="checkbox"/>	46	3	16-QAM	QPSK	QPSK	-	78	86.7	<input type="checkbox"/>
<input type="checkbox"/>	47	3	16-QAM	16-QAM	QPSK	-	97.5	108.3	<input type="checkbox"/>
<input type="checkbox"/>	48	3	64-QAM	QPSK	QPSK	-	97.5	108.3	<input type="checkbox"/>
<input type="checkbox"/>	49	3	64-QAM	16-QAM	QPSK	-	117	130	<input type="checkbox"/>
<input type="checkbox"/>	50	3	64-QAM	16-QAM	16-QAM	-	136.5	151.7	<input type="checkbox"/>
<input type="checkbox"/>	51	3	64-QAM	64-QAM	QPSK	-	136.5	151.7	<input type="checkbox"/>
<input type="checkbox"/>	52	3	64-QAM	64-QAM	16-QAM	-	156	173.3	<input type="checkbox"/>
<input type="checkbox"/>	53	4	16-QAM	QPSK	QPSK	QPSK	65	72.2	<input type="checkbox"/>
<input type="checkbox"/>	54	4	16-QAM	16-QAM	QPSK	QPSK	78	86.7	<input type="checkbox"/>
<input type="checkbox"/>	55	4	16-QAM	16-QAM	16-QAM	QPSK	91	101.1	<input type="checkbox"/>
<input type="checkbox"/>	56	4	64-QAM	QPSK	QPSK	QPSK	78	86.7	<input type="checkbox"/>
<input type="checkbox"/>	57	4	64-QAM	16-QAM	QPSK	QPSK	91	101.1	<input type="checkbox"/>
<input type="checkbox"/>	58	4	64-QAM	16-QAM	16-QAM	QPSK	104	115.6	<input type="checkbox"/>
<input type="checkbox"/>	59	4	64-QAM	16-QAM	16-QAM	16-QAM	117	130	<input type="checkbox"/>
<input type="checkbox"/>	60	4	64-QAM	QPSK	QPSK	QPSK	104	115.6	<input type="checkbox"/>
<input type="checkbox"/>	61	4	64-QAM	16-QAM	16-QAM	QPSK	117	130	<input type="checkbox"/>
<input type="checkbox"/>	62	4	64-QAM	16-QAM	16-QAM	16-QAM	130	144.4	<input type="checkbox"/>
<input type="checkbox"/>	63	4	64-QAM	64-QAM	64-QAM	QPSK	130	144.4	<input type="checkbox"/>
<input type="checkbox"/>	64	4	64-QAM	64-QAM	64-QAM	16-QAM	143	158.9	<input type="checkbox"/>
<input type="checkbox"/>	65	4	16-QAM	QPSK	QPSK	QPSK	97.5	108.3	<input type="checkbox"/>
<input type="checkbox"/>	66	4	16-QAM	16-QAM	QPSK	QPSK	117	130	<input type="checkbox"/>
<input type="checkbox"/>	67	4	16-QAM	16-QAM	16-QAM	QPSK	136.5	151.7	<input type="checkbox"/>
<input type="checkbox"/>	68	4	64-QAM	QPSK	QPSK	QPSK	117	130	<input type="checkbox"/>
<input type="checkbox"/>	69	4	64-QAM	16-QAM	QPSK	QPSK	136.5	151.7	<input type="checkbox"/>
<input type="checkbox"/>	70	4	64-QAM	16-QAM	16-QAM	QPSK	156	173.3	<input type="checkbox"/>
<input type="checkbox"/>	71	4	64-QAM	16-QAM	16-QAM	16-QAM	175.5	195	<input type="checkbox"/>
<input type="checkbox"/>	72	4	64-QAM	64-QAM	QPSK	QPSK	156	173.3	<input type="checkbox"/>
<input type="checkbox"/>	73	4	64-QAM	64-QAM	16-QAM	QPSK	175.5	195	<input type="checkbox"/>
<input type="checkbox"/>	74	4	64-QAM	64-QAM	16-QAM	16-QAM	195	216.7	<input type="checkbox"/>
<input type="checkbox"/>	75	4	64-QAM	64-QAM	64-QAM	QPSK	195	216.7	<input type="checkbox"/>
<input type="checkbox"/>	76	4	64-QAM	64-QAM	64-QAM	16-QAM	214.5	238.3	<input type="checkbox"/>



L C I E

DATA RATE									
802.11n HT40									
Available for EUT	MCS Index	Spatial streams	Modulation				Data Rate (Mbps)		Worst Case Modulation
							(GI = 800ns)	(GI = 400ns)	
<input checked="" type="checkbox"/>	0	1	BPSK				13	15	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	1	1	QPSK				27	30	<input type="checkbox"/>
<input checked="" type="checkbox"/>	2	1	QPSK				40.5	45	<input type="checkbox"/>
<input checked="" type="checkbox"/>	3	1	16-QAM				54	60	<input type="checkbox"/>
<input checked="" type="checkbox"/>	4	1	16-QAM				81	90	<input type="checkbox"/>
<input checked="" type="checkbox"/>	5	1	64-QAM				108	120	<input type="checkbox"/>
<input checked="" type="checkbox"/>	6	1	64-QAM				121.5	135	<input type="checkbox"/>
<input checked="" type="checkbox"/>	7	1	64-QAM				135	150	<input type="checkbox"/>
<input checked="" type="checkbox"/>	8	2	BPSK				27	30	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	9	2	QPSK				54	60	<input type="checkbox"/>
<input checked="" type="checkbox"/>	10	2	QPSK				81	90	<input type="checkbox"/>
<input checked="" type="checkbox"/>	11	2	16-QAM				108	120	<input type="checkbox"/>
<input checked="" type="checkbox"/>	12	2	16-QAM				162	180	<input type="checkbox"/>
<input checked="" type="checkbox"/>	13	2	64-QAM				216	240	<input type="checkbox"/>
<input checked="" type="checkbox"/>	14	2	64-QAM				243	270	<input type="checkbox"/>
<input checked="" type="checkbox"/>	15	2	64-QAM				270	300	<input type="checkbox"/>
<input checked="" type="checkbox"/>	16	3	BPSK				40.5	45	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	17	3	QPSK				81	90	<input type="checkbox"/>
<input checked="" type="checkbox"/>	18	3	QPSK				121.5	135	<input type="checkbox"/>
<input checked="" type="checkbox"/>	19	3	16-QAM				162	180	<input type="checkbox"/>
<input checked="" type="checkbox"/>	20	3	16-QAM				243	270	<input type="checkbox"/>
<input checked="" type="checkbox"/>	21	3	64-QAM				324	360	<input type="checkbox"/>
<input checked="" type="checkbox"/>	22	3	64-QAM				364.5	405	<input type="checkbox"/>
<input checked="" type="checkbox"/>	23	3	64-QAM				405	450	<input type="checkbox"/>
<input checked="" type="checkbox"/>	24	4	BPSK				54	60	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	25	4	QPSK				108	120	<input type="checkbox"/>
<input checked="" type="checkbox"/>	26	4	QPSK				162	180	<input type="checkbox"/>
<input checked="" type="checkbox"/>	27	4	16-QAM				216	240	<input type="checkbox"/>
<input checked="" type="checkbox"/>	28	4	16-QAM				324	360	<input type="checkbox"/>
<input checked="" type="checkbox"/>	29	4	64-QAM				432	480	<input type="checkbox"/>
<input checked="" type="checkbox"/>	30	4	64-QAM				486	540	<input type="checkbox"/>
<input checked="" type="checkbox"/>	31	4	64-QAM				540	600	<input type="checkbox"/>
<input type="checkbox"/>	32	1	BPSK	-	-	-	6.0	6.7	<input type="checkbox"/>
<input type="checkbox"/>	33	2	16-QAM	QPSK	-	-	81	90.0	<input type="checkbox"/>
<input type="checkbox"/>	34	2	64-QAM	QPSK	-	-	108	120	<input type="checkbox"/>
<input type="checkbox"/>	35	2	64-QAM	16-QAM	-	-	135	150	<input type="checkbox"/>
<input type="checkbox"/>	36	2	16-QAM	QPSK	-	-	121.5	135	<input type="checkbox"/>
<input type="checkbox"/>	37	2	64-QAM	QPSK	-	-	162	180	<input type="checkbox"/>
<input type="checkbox"/>	38	2	64-QAM	16-QAM	-	-	202.5	225	<input type="checkbox"/>
<input type="checkbox"/>	39	3	16-QAM	QPSK	QPSK	-	108	120	<input type="checkbox"/>
<input type="checkbox"/>	40	3	16-QAM	16-QAM	QPSK	-	135	150	<input type="checkbox"/>
<input type="checkbox"/>	41	3	64-QAM	QPSK	QPSK	-	135	150	<input type="checkbox"/>
<input type="checkbox"/>	42	3	64-QAM	16-QAM	QPSK	-	162	180	<input type="checkbox"/>
<input type="checkbox"/>	43	3	64-QAM	16-QAM	16-QAM	-	189	210	<input type="checkbox"/>
<input type="checkbox"/>	44	3	64-QAM	64-QAM	QPSK	-	189	210	<input type="checkbox"/>
<input type="checkbox"/>	45	3	64-QAM	64-QAM	16-QAM	-	216	240	<input type="checkbox"/>
<input type="checkbox"/>	46	3	16-QAM	QPSK	QPSK	-	162	180	<input type="checkbox"/>
<input type="checkbox"/>	47	3	16-QAM	16-QAM	QPSK	-	202.5	225	<input type="checkbox"/>
<input type="checkbox"/>	48	3	64-QAM	QPSK	QPSK	-	202.5	225	<input type="checkbox"/>
<input type="checkbox"/>	49	3	64-QAM	16-QAM	QPSK	-	243	270	<input type="checkbox"/>
<input type="checkbox"/>	50	3	64-QAM	16-QAM	16-QAM	-	283.5	315	<input type="checkbox"/>
<input type="checkbox"/>	51	3	64-QAM	64-QAM	QPSK	-	283.5	315	<input type="checkbox"/>
<input type="checkbox"/>	52	3	64-QAM	64-QAM	16-QAM	-	324	360	<input type="checkbox"/>
<input type="checkbox"/>	53	4	16-QAM	QPSK	QPSK	QPSK	135	150	<input type="checkbox"/>
<input type="checkbox"/>	54	4	16-QAM	16-QAM	QPSK	QPSK	162	180	<input type="checkbox"/>
<input type="checkbox"/>	55	4	16-QAM	16-QAM	16-QAM	QPSK	189	210	<input type="checkbox"/>
<input type="checkbox"/>	56	4	64-QAM	QPSK	QPSK	QPSK	162	180	<input type="checkbox"/>
<input type="checkbox"/>	57	4	64-QAM	16-QAM	QPSK	QPSK	189	210	<input type="checkbox"/>
<input type="checkbox"/>	58	4	64-QAM	16-QAM	16-QAM	QPSK	216	240	<input type="checkbox"/>
<input type="checkbox"/>	59	4	64-QAM	16-QAM	16-QAM	16-QAM	243	270	<input type="checkbox"/>
<input type="checkbox"/>	60	4	64-QAM	QPSK	QPSK	QPSK	216	240	<input type="checkbox"/>
<input type="checkbox"/>	61	4	64-QAM	16-QAM	16-QAM	QPSK	243	270	<input type="checkbox"/>
<input type="checkbox"/>	62	4	64-QAM	16-QAM	16-QAM	16-QAM	270	300	<input type="checkbox"/>
<input type="checkbox"/>	63	4	64-QAM	64-QAM	64-QAM	QPSK	270	300	<input type="checkbox"/>
<input type="checkbox"/>	64	4	64-QAM	64-QAM	64-QAM	16-QAM	297	330	<input type="checkbox"/>
<input type="checkbox"/>	65	4	16-QAM	QPSK	QPSK	QPSK	202.5	225	<input type="checkbox"/>
<input type="checkbox"/>	66	4	16-QAM	16-QAM	QPSK	QPSK	243	270	<input type="checkbox"/>
<input type="checkbox"/>	67	4	16-QAM	16-QAM	16-QAM	QPSK	283.5	315	<input type="checkbox"/>
<input type="checkbox"/>	68	4	64-QAM	QPSK	QPSK	QPSK	243	270	<input type="checkbox"/>
<input type="checkbox"/>	69	4	64-QAM	16-QAM	QPSK	QPSK	283.5	315	<input type="checkbox"/>
<input type="checkbox"/>	70	4	64-QAM	16-QAM	16-QAM	QPSK	324	360	<input type="checkbox"/>
<input type="checkbox"/>	71	4	64-QAM	16-QAM	16-QAM	16-QAM	364.5	405	<input type="checkbox"/>
<input type="checkbox"/>	72	4	64-QAM	64-QAM	QPSK	QPSK	324	360	<input type="checkbox"/>
<input type="checkbox"/>	73	4	64-QAM	64-QAM	16-QAM	QPSK	364.5	405	<input type="checkbox"/>
<input type="checkbox"/>	74	4	64-QAM	64-QAM	16-QAM	16-QAM	405	450	<input type="checkbox"/>
<input type="checkbox"/>	75	4	64-QAM	64-QAM	64-QAM	QPSK	405	450	<input type="checkbox"/>
<input type="checkbox"/>	76	4	64-QAM	64-QAM	64-QAM	16-QAM	445.5	495	<input type="checkbox"/>



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DATA RATE: 802.11ac VHT20							
Available for EUT	MCS Index	Nbr of spatial streams	Modulation (Stream 1/2/3/4)	Coding rate	GI = 800ns	GI = 400ns	Worst Case Modulation
<input checked="" type="checkbox"/>	0	1	BPSK	1/2	6,5	7,2	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	1	1	QPSK	1/2	13	14,4	<input type="checkbox"/>
<input checked="" type="checkbox"/>	2	1	QPSK	3/4	19,5	21,7	<input type="checkbox"/>
<input checked="" type="checkbox"/>	3	1	16-QAM	1/2	26	28,9	<input type="checkbox"/>
<input checked="" type="checkbox"/>	4	1	16-QAM	3/4	39	43,3	<input type="checkbox"/>
<input checked="" type="checkbox"/>	5	1	64-QAM	2/3	52	57,8	<input type="checkbox"/>
<input checked="" type="checkbox"/>	6	1	64-QAM	3/4	58,5	65	<input type="checkbox"/>
<input checked="" type="checkbox"/>	7	1	64-QAM	5/6	65	72,2	<input type="checkbox"/>
<input checked="" type="checkbox"/>	8	1	256-QAM	3/4	78	86,7	<input type="checkbox"/>
<input checked="" type="checkbox"/>	9	1	256-QAM	5/6	N/A	N/A	<input type="checkbox"/>
<input checked="" type="checkbox"/>	10	2	BPSK	1/2	13	14,4	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	11	2	QPSK	1/2	26	28,8	<input type="checkbox"/>
<input checked="" type="checkbox"/>	12	2	QPSK	3/4	39	43,4	<input type="checkbox"/>
<input checked="" type="checkbox"/>	13	2	16-QAM	1/2	52	57,8	<input type="checkbox"/>
<input checked="" type="checkbox"/>	14	2	16-QAM	3/4	78	86,6	<input type="checkbox"/>
<input checked="" type="checkbox"/>	15	2	64-QAM	2/3	104	115,6	<input type="checkbox"/>
<input checked="" type="checkbox"/>	16	2	64-QAM	3/4	117	130	<input type="checkbox"/>
<input checked="" type="checkbox"/>	17	2	64-QAM	5/6	130	144,4	<input type="checkbox"/>
<input checked="" type="checkbox"/>	18	2	256-QAM	3/4	156	173,4	<input type="checkbox"/>
<input checked="" type="checkbox"/>	19	2	256-QAM	5/6	N/A	N/A	<input type="checkbox"/>
<input checked="" type="checkbox"/>	20	3	BPSK	1/2	19,5	21,6	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	21	3	QPSK	1/2	39	43,2	<input type="checkbox"/>
<input checked="" type="checkbox"/>	22	3	QPSK	3/4	58,5	65,1	<input type="checkbox"/>
<input checked="" type="checkbox"/>	23	3	16-QAM	1/2	78	86,7	<input type="checkbox"/>
<input checked="" type="checkbox"/>	24	3	16-QAM	3/4	117	129,9	<input type="checkbox"/>
<input checked="" type="checkbox"/>	25	3	64-QAM	2/3	156	173,4	<input type="checkbox"/>
<input checked="" type="checkbox"/>	26	3	64-QAM	3/4	175,5	195	<input type="checkbox"/>
<input checked="" type="checkbox"/>	27	3	64-QAM	5/6	195	216,6	<input type="checkbox"/>
<input checked="" type="checkbox"/>	28	3	256-QAM	3/4	234	260,1	<input type="checkbox"/>
<input checked="" type="checkbox"/>	29	3	256-QAM	5/6	N/A	N/A	<input type="checkbox"/>
<input checked="" type="checkbox"/>	30	4	BPSK	1/2	26	28,8	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	31	4	QPSK	1/2	52	57,6	<input type="checkbox"/>
<input checked="" type="checkbox"/>	32	4	QPSK	3/4	78	86,8	<input type="checkbox"/>
<input checked="" type="checkbox"/>	33	4	16-QAM	1/2	104	115,6	<input type="checkbox"/>
<input checked="" type="checkbox"/>	34	4	16-QAM	3/4	156	173,2	<input type="checkbox"/>
<input checked="" type="checkbox"/>	35	4	64-QAM	2/3	208	231,2	<input type="checkbox"/>
<input checked="" type="checkbox"/>	36	4	64-QAM	3/4	234	260	<input type="checkbox"/>
<input checked="" type="checkbox"/>	37	4	64-QAM	5/6	260	288,8	<input type="checkbox"/>
<input checked="" type="checkbox"/>	38	4	256-QAM	3/4	312	346,8	<input type="checkbox"/>
<input checked="" type="checkbox"/>	39	4	256-QAM	5/6	N/A	N/A	<input type="checkbox"/>
<input type="checkbox"/>	40	5	BPSK	1/2	32,5	36	<input type="checkbox"/>
<input type="checkbox"/>	41	5	QPSK	1/2	65	72	<input type="checkbox"/>
<input type="checkbox"/>	42	5	QPSK	3/4	97,5	108,5	<input type="checkbox"/>
<input type="checkbox"/>	43	5	16-QAM	1/2	130	144,5	<input type="checkbox"/>
<input type="checkbox"/>	44	5	16-QAM	3/4	195	216,5	<input type="checkbox"/>
<input type="checkbox"/>	45	5	64-QAM	2/3	260	289	<input type="checkbox"/>
<input type="checkbox"/>	46	5	64-QAM	3/4	292,5	325	<input type="checkbox"/>
<input type="checkbox"/>	47	5	64-QAM	5/6	325	361	<input type="checkbox"/>
<input type="checkbox"/>	48	5	256-QAM	3/4	390	433,5	<input type="checkbox"/>
<input type="checkbox"/>	49	5	256-QAM	5/6	N/A	N/A	<input type="checkbox"/>
<input type="checkbox"/>	50	6	BPSK	1/2	39	43,2	<input type="checkbox"/>
<input type="checkbox"/>	51	6	QPSK	1/2	78	86,4	<input type="checkbox"/>
<input type="checkbox"/>	52	6	QPSK	3/4	117	130,2	<input type="checkbox"/>
<input type="checkbox"/>	53	6	16-QAM	1/2	156	173,4	<input type="checkbox"/>
<input type="checkbox"/>	54	6	16-QAM	3/4	234	259,8	<input type="checkbox"/>
<input type="checkbox"/>	55	6	64-QAM	2/3	312	346,8	<input type="checkbox"/>
<input type="checkbox"/>	56	6	64-QAM	3/4	351	390	<input type="checkbox"/>
<input type="checkbox"/>	57	6	64-QAM	5/6	390	433,2	<input type="checkbox"/>
<input type="checkbox"/>	58	6	256-QAM	3/4	468	520,2	<input type="checkbox"/>
<input type="checkbox"/>	59	6	256-QAM	5/6	N/A	N/A	<input type="checkbox"/>
<input type="checkbox"/>	60	7	BPSK	1/2	45,5	50,4	<input type="checkbox"/>
<input type="checkbox"/>	61	7	QPSK	1/2	91	100,8	<input type="checkbox"/>
<input type="checkbox"/>	62	7	QPSK	3/4	136,5	151,9	<input type="checkbox"/>
<input type="checkbox"/>	63	7	16-QAM	1/2	182	202,3	<input type="checkbox"/>
<input type="checkbox"/>	64	7	16-QAM	3/4	273	303,1	<input type="checkbox"/>
<input type="checkbox"/>	65	7	64-QAM	2/3	364	404,6	<input type="checkbox"/>
<input type="checkbox"/>	66	7	64-QAM	3/4	409,5	455	<input type="checkbox"/>
<input type="checkbox"/>	67	7	64-QAM	5/6	455	505,4	<input type="checkbox"/>
<input type="checkbox"/>	68	7	256-QAM	3/4	546	606,9	<input type="checkbox"/>
<input type="checkbox"/>	69	7	256-QAM	5/6	N/A	N/A	<input type="checkbox"/>
<input type="checkbox"/>	70	8	BPSK	1/2	52	57,6	<input type="checkbox"/>
<input type="checkbox"/>	71	8	QPSK	1/2	104	115,2	<input type="checkbox"/>
<input type="checkbox"/>	72	8	QPSK	3/4	156	173,6	<input type="checkbox"/>
<input type="checkbox"/>	73	8	16-QAM	1/2	208	231,2	<input type="checkbox"/>
<input type="checkbox"/>	74	8	16-QAM	3/4	312	346,4	<input type="checkbox"/>
<input type="checkbox"/>	75	8	64-QAM	2/3	416	462,4	<input type="checkbox"/>
<input type="checkbox"/>	76	8	64-QAM	3/4	468	520	<input type="checkbox"/>
<input type="checkbox"/>	77	8	64-QAM	5/6	520	577,6	<input type="checkbox"/>
<input type="checkbox"/>	78	8	256-QAM	3/4	624	693,6	<input type="checkbox"/>
<input type="checkbox"/>	79	8	256-QAM	5/6	N/A	N/A	<input type="checkbox"/>



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DATA RATE: 802.11ac VHT40							
Available for EUT	MCS Index	Nbr of spatial streams	Modulation (Stream 1/2/3/4)	Coding rate	GI = 800ns	GI = 400ns	Worst Case Modulation
<input checked="" type="checkbox"/>	0	1	BPSK	1/2	13,5	15	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	1	1	QPSK	1/2	27	30	<input type="checkbox"/>
<input checked="" type="checkbox"/>	2	1	QPSK	3/4	40,5	45	<input type="checkbox"/>
<input checked="" type="checkbox"/>	3	1	16-QAM	1/2	54	60	<input type="checkbox"/>
<input checked="" type="checkbox"/>	4	1	16-QAM	3/4	81	90	<input type="checkbox"/>
<input checked="" type="checkbox"/>	5	1	64-QAM	2/3	108	120	<input type="checkbox"/>
<input checked="" type="checkbox"/>	6	1	64-QAM	3/4	121,5	135	<input type="checkbox"/>
<input checked="" type="checkbox"/>	7	1	64-QAM	5/6	135	150	<input type="checkbox"/>
<input checked="" type="checkbox"/>	8	1	256-QAM	3/4	162	180	<input type="checkbox"/>
<input checked="" type="checkbox"/>	9	1	256-QAM	5/6	180	200	<input type="checkbox"/>
<input checked="" type="checkbox"/>	10	2	BPSK	1/2	27	30	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	11	2	QPSK	1/2	54	60	<input type="checkbox"/>
<input checked="" type="checkbox"/>	12	2	QPSK	3/4	81	90	<input type="checkbox"/>
<input checked="" type="checkbox"/>	13	2	16-QAM	1/2	108	120	<input type="checkbox"/>
<input checked="" type="checkbox"/>	14	2	16-QAM	3/4	162	180	<input type="checkbox"/>
<input checked="" type="checkbox"/>	15	2	64-QAM	2/3	216	240	<input type="checkbox"/>
<input checked="" type="checkbox"/>	16	2	64-QAM	3/4	243	270	<input type="checkbox"/>
<input checked="" type="checkbox"/>	17	2	64-QAM	5/6	270	300	<input type="checkbox"/>
<input checked="" type="checkbox"/>	18	2	256-QAM	3/4	324	360	<input type="checkbox"/>
<input checked="" type="checkbox"/>	19	2	256-QAM	5/6	360	400	<input type="checkbox"/>
<input checked="" type="checkbox"/>	20	3	BPSK	1/2	40,5	45	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	21	3	QPSK	1/2	81	90	<input type="checkbox"/>
<input checked="" type="checkbox"/>	22	3	QPSK	3/4	121,5	135	<input type="checkbox"/>
<input checked="" type="checkbox"/>	23	3	16-QAM	1/2	162	180	<input type="checkbox"/>
<input checked="" type="checkbox"/>	24	3	16-QAM	3/4	243	270	<input type="checkbox"/>
<input checked="" type="checkbox"/>	25	3	64-QAM	2/3	324	360	<input type="checkbox"/>
<input checked="" type="checkbox"/>	26	3	64-QAM	3/4	364,5	405	<input type="checkbox"/>
<input checked="" type="checkbox"/>	27	3	64-QAM	5/6	405	450	<input type="checkbox"/>
<input checked="" type="checkbox"/>	28	3	256-QAM	3/4	486	540	<input type="checkbox"/>
<input checked="" type="checkbox"/>	29	3	256-QAM	5/6	540	600	<input type="checkbox"/>
<input checked="" type="checkbox"/>	30	4	BPSK	1/2	54	60	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	31	4	QPSK	1/2	108	120	<input type="checkbox"/>
<input checked="" type="checkbox"/>	32	4	QPSK	3/4	162	180	<input type="checkbox"/>
<input checked="" type="checkbox"/>	33	4	16-QAM	1/2	216	240	<input type="checkbox"/>
<input checked="" type="checkbox"/>	34	4	16-QAM	3/4	324	360	<input type="checkbox"/>
<input checked="" type="checkbox"/>	35	4	64-QAM	2/3	432	480	<input type="checkbox"/>
<input checked="" type="checkbox"/>	36	4	64-QAM	3/4	486	540	<input type="checkbox"/>
<input checked="" type="checkbox"/>	37	4	64-QAM	5/6	540	600	<input type="checkbox"/>
<input checked="" type="checkbox"/>	38	4	256-QAM	3/4	648	720	<input type="checkbox"/>
<input checked="" type="checkbox"/>	39	4	256-QAM	5/6	720	800	<input type="checkbox"/>
<input type="checkbox"/>	40	5	BPSK	1/2	67,5	75	<input type="checkbox"/>
<input type="checkbox"/>	41	5	QPSK	1/2	135	150	<input type="checkbox"/>
<input type="checkbox"/>	42	5	QPSK	3/4	202,5	225	<input type="checkbox"/>
<input type="checkbox"/>	43	5	16-QAM	1/2	270	300	<input type="checkbox"/>
<input type="checkbox"/>	44	5	16-QAM	3/4	405	450	<input type="checkbox"/>
<input type="checkbox"/>	45	5	64-QAM	2/3	540	600	<input type="checkbox"/>
<input type="checkbox"/>	46	5	64-QAM	3/4	607,5	675	<input type="checkbox"/>
<input type="checkbox"/>	47	5	64-QAM	5/6	675	750	<input type="checkbox"/>
<input type="checkbox"/>	48	5	256-QAM	3/4	810	900	<input type="checkbox"/>
<input type="checkbox"/>	49	5	256-QAM	5/6	900	1000	<input type="checkbox"/>
<input type="checkbox"/>	50	6	BPSK	1/2	81	90	<input type="checkbox"/>
<input type="checkbox"/>	51	6	QPSK	1/2	162	180	<input type="checkbox"/>
<input type="checkbox"/>	52	6	QPSK	3/4	243	270	<input type="checkbox"/>
<input type="checkbox"/>	53	6	16-QAM	1/2	324	360	<input type="checkbox"/>
<input type="checkbox"/>	54	6	16-QAM	3/4	486	540	<input type="checkbox"/>
<input type="checkbox"/>	55	6	64-QAM	2/3	648	720	<input type="checkbox"/>
<input type="checkbox"/>	56	6	64-QAM	3/4	729	810	<input type="checkbox"/>
<input type="checkbox"/>	57	6	64-QAM	5/6	810	900	<input type="checkbox"/>
<input type="checkbox"/>	58	6	256-QAM	3/4	972	1080	<input type="checkbox"/>
<input type="checkbox"/>	59	6	256-QAM	5/6	1080	1200	<input type="checkbox"/>
<input type="checkbox"/>	60	7	BPSK	1/2	94,5	105	<input type="checkbox"/>
<input type="checkbox"/>	61	7	QPSK	1/2	189	210	<input type="checkbox"/>
<input type="checkbox"/>	62	7	QPSK	3/4	283,5	315	<input type="checkbox"/>
<input type="checkbox"/>	63	7	16-QAM	1/2	378	420	<input type="checkbox"/>
<input type="checkbox"/>	64	7	16-QAM	3/4	567	630	<input type="checkbox"/>
<input type="checkbox"/>	65	7	64-QAM	2/3	756	840	<input type="checkbox"/>
<input type="checkbox"/>	66	7	64-QAM	3/4	850,5	945	<input type="checkbox"/>
<input type="checkbox"/>	67	7	64-QAM	5/6	945	1050	<input type="checkbox"/>
<input type="checkbox"/>	68	7	256-QAM	3/4	1134	1260	<input type="checkbox"/>
<input type="checkbox"/>	69	7	256-QAM	5/6	1260	1400	<input type="checkbox"/>
<input type="checkbox"/>	70	8	BPSK	1/2	108	120	<input type="checkbox"/>
<input type="checkbox"/>	71	8	QPSK	1/2	216	240	<input type="checkbox"/>
<input type="checkbox"/>	72	8	QPSK	3/4	324	360	<input type="checkbox"/>
<input type="checkbox"/>	73	8	16-QAM	1/2	432	480	<input type="checkbox"/>
<input type="checkbox"/>	74	8	16-QAM	3/4	648	720	<input type="checkbox"/>
<input type="checkbox"/>	75	8	64-QAM	2/3	864	960	<input type="checkbox"/>
<input type="checkbox"/>	76	8	64-QAM	3/4	972	1080	<input type="checkbox"/>
<input type="checkbox"/>	77	8	64-QAM	5/6	1080	1200	<input type="checkbox"/>
<input type="checkbox"/>	78	8	256-QAM	3/4	1296	1440	<input type="checkbox"/>
<input type="checkbox"/>	79	8	256-QAM	5/6	1440	1600	<input type="checkbox"/>



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DATA RATE: 802.11ac VHT80							
Available for EUT	MCS Index	Nbr of spatial streams	Modulation (Stream 1/2/3/4)	Coding rate	GI = 800ns	GI = 400ns	Worst Case Modulation
<input checked="" type="checkbox"/>	0	1	BPSK	1/2	29.3	32.5	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	1	1	QPSK	1/2	58.5	65	<input type="checkbox"/>
<input checked="" type="checkbox"/>	2	1	QPSK	3/4	87.8	97.5	<input type="checkbox"/>
<input checked="" type="checkbox"/>	3	1	16-QAM	1/2	117	130	<input type="checkbox"/>
<input checked="" type="checkbox"/>	4	1	16-QAM	3/4	175.5	195	<input type="checkbox"/>
<input checked="" type="checkbox"/>	5	1	64-QAM	2/3	234	260	<input type="checkbox"/>
<input checked="" type="checkbox"/>	6	1	64-QAM	3/4	263.3	292.5	<input type="checkbox"/>
<input checked="" type="checkbox"/>	7	1	64-QAM	5/6	292.5	325	<input type="checkbox"/>
<input checked="" type="checkbox"/>	8	1	256-QAM	3/4	351	390	<input type="checkbox"/>
<input checked="" type="checkbox"/>	9	1	256-QAM	5/6	390	433.3	<input type="checkbox"/>
<input checked="" type="checkbox"/>	10	2	BPSK	1/2	58.6	65	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	11	2	QPSK	1/2	117	130	<input type="checkbox"/>
<input checked="" type="checkbox"/>	12	2	QPSK	3/4	175.6	195	<input type="checkbox"/>
<input checked="" type="checkbox"/>	13	2	16-QAM	1/2	234	260	<input type="checkbox"/>
<input checked="" type="checkbox"/>	14	2	16-QAM	3/4	351	390	<input type="checkbox"/>
<input checked="" type="checkbox"/>	15	2	64-QAM	2/3	468	520	<input type="checkbox"/>
<input checked="" type="checkbox"/>	16	2	64-QAM	3/4	526.6	585	<input type="checkbox"/>
<input checked="" type="checkbox"/>	17	2	64-QAM	5/6	585	650	<input type="checkbox"/>
<input checked="" type="checkbox"/>	18	2	256-QAM	3/4	702	780	<input type="checkbox"/>
<input checked="" type="checkbox"/>	19	2	256-QAM	5/6	780	866.6	<input type="checkbox"/>
<input checked="" type="checkbox"/>	20	3	BPSK	1/2	87.9	97.5	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	21	3	QPSK	1/2	175.5	195	<input type="checkbox"/>
<input checked="" type="checkbox"/>	22	3	QPSK	3/4	263.4	292.5	<input type="checkbox"/>
<input checked="" type="checkbox"/>	23	3	16-QAM	1/2	351	390	<input type="checkbox"/>
<input checked="" type="checkbox"/>	24	3	16-QAM	3/4	526.5	585	<input type="checkbox"/>
<input checked="" type="checkbox"/>	25	3	64-QAM	2/3	702	780	<input type="checkbox"/>
<input checked="" type="checkbox"/>	26	3	64-QAM	3/4	789.9	877.5	<input type="checkbox"/>
<input checked="" type="checkbox"/>	27	3	64-QAM	5/6	877.5	975	<input type="checkbox"/>
<input checked="" type="checkbox"/>	28	3	256-QAM	3/4	1053	1170	<input type="checkbox"/>
<input checked="" type="checkbox"/>	29	3	256-QAM	5/6	1170	1299.9	<input type="checkbox"/>
<input checked="" type="checkbox"/>	30	4	BPSK	1/2	117.2	130	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	31	4	QPSK	1/2	234	260	<input type="checkbox"/>
<input checked="" type="checkbox"/>	32	4	QPSK	3/4	351.2	390	<input type="checkbox"/>
<input checked="" type="checkbox"/>	33	4	16-QAM	1/2	468	520	<input type="checkbox"/>
<input checked="" type="checkbox"/>	34	4	16-QAM	3/4	702	780	<input type="checkbox"/>
<input checked="" type="checkbox"/>	35	4	64-QAM	2/3	936	1040	<input type="checkbox"/>
<input checked="" type="checkbox"/>	36	4	64-QAM	3/4	1053.2	1170	<input type="checkbox"/>
<input checked="" type="checkbox"/>	37	4	64-QAM	5/6	1170	1300	<input type="checkbox"/>
<input checked="" type="checkbox"/>	38	4	256-QAM	3/4	1404	1560	<input type="checkbox"/>
<input checked="" type="checkbox"/>	39	4	256-QAM	5/6	1560	1733.2	<input type="checkbox"/>
<input type="checkbox"/>	40	5	BPSK	1/2	146.5	162.5	<input type="checkbox"/>
<input type="checkbox"/>	41	5	QPSK	1/2	292.5	325	<input type="checkbox"/>
<input type="checkbox"/>	42	5	QPSK	3/4	439	487.5	<input type="checkbox"/>
<input type="checkbox"/>	43	5	16-QAM	1/2	585	650	<input type="checkbox"/>
<input type="checkbox"/>	44	5	16-QAM	3/4	877.5	975	<input type="checkbox"/>
<input type="checkbox"/>	45	5	64-QAM	2/3	1170	1300	<input type="checkbox"/>
<input type="checkbox"/>	46	5	64-QAM	3/4	1316.5	1462.5	<input type="checkbox"/>
<input type="checkbox"/>	47	5	64-QAM	5/6	1462.5	1625	<input type="checkbox"/>
<input type="checkbox"/>	48	5	256-QAM	3/4	1755	1950	<input type="checkbox"/>
<input type="checkbox"/>	49	5	256-QAM	5/6	1950	2166.5	<input type="checkbox"/>
<input type="checkbox"/>	50	6	BPSK	1/2	175.8	195	<input type="checkbox"/>
<input type="checkbox"/>	51	6	QPSK	1/2	351	390	<input type="checkbox"/>
<input type="checkbox"/>	52	6	QPSK	3/4	526.8	585	<input type="checkbox"/>
<input type="checkbox"/>	53	6	16-QAM	1/2	702	780	<input type="checkbox"/>
<input type="checkbox"/>	54	6	16-QAM	3/4	1053	1170	<input type="checkbox"/>
<input type="checkbox"/>	55	6	64-QAM	2/3	1404	1560	<input type="checkbox"/>
<input type="checkbox"/>	56	6	64-QAM	3/4	1579.8	1755	<input type="checkbox"/>
<input type="checkbox"/>	57	6	64-QAM	5/6	1755	1950	<input type="checkbox"/>
<input type="checkbox"/>	58	6	256-QAM	3/4	2106	2340	<input type="checkbox"/>
<input type="checkbox"/>	59	6	256-QAM	5/6	2340	2599.8	<input type="checkbox"/>
<input type="checkbox"/>	60	7	BPSK	1/2	205.1	227.5	<input type="checkbox"/>
<input type="checkbox"/>	61	7	QPSK	1/2	409.5	455	<input type="checkbox"/>
<input type="checkbox"/>	62	7	QPSK	3/4	614.6	682.5	<input type="checkbox"/>
<input type="checkbox"/>	63	7	16-QAM	1/2	819	910	<input type="checkbox"/>
<input type="checkbox"/>	64	7	16-QAM	3/4	1228.5	1365	<input type="checkbox"/>
<input type="checkbox"/>	65	7	64-QAM	2/3	1638	1820	<input type="checkbox"/>
<input type="checkbox"/>	66	7	64-QAM	3/4	1843.1	2047.5	<input type="checkbox"/>
<input type="checkbox"/>	67	7	64-QAM	5/6	2047.5	2275	<input type="checkbox"/>
<input type="checkbox"/>	68	7	256-QAM	3/4	2457	2730	<input type="checkbox"/>
<input type="checkbox"/>	69	7	256-QAM	5/6	2730	3033.1	<input type="checkbox"/>
<input type="checkbox"/>	70	8	BPSK	1/2	234.4	260	<input type="checkbox"/>
<input type="checkbox"/>	71	8	QPSK	1/2	468	520	<input type="checkbox"/>
<input type="checkbox"/>	72	8	QPSK	3/4	702.4	780	<input type="checkbox"/>
<input type="checkbox"/>	73	8	16-QAM	1/2	936	1040	<input type="checkbox"/>
<input type="checkbox"/>	74	8	16-QAM	3/4	1404	1560	<input type="checkbox"/>
<input type="checkbox"/>	75	8	64-QAM	2/3	1872	2080	<input type="checkbox"/>
<input type="checkbox"/>	76	8	64-QAM	3/4	2106.4	2340	<input type="checkbox"/>
<input type="checkbox"/>	77	8	64-QAM	5/6	2340	2600	<input type="checkbox"/>
<input type="checkbox"/>	78	8	256-QAM	3/4	2808	3120	<input type="checkbox"/>
<input type="checkbox"/>	79	8	256-QAM	5/6	3120	3466.4	<input type="checkbox"/>



## 2.2. RUNNING MODE

The EUT is set in the following modes during tests:

- Permanent emission with modulation on a fixed channel in the data rate that produced the highest power
- Permanent emission with modulation on a fixed channel in the data rate that produced the lowest power
- Permanent reception

Following commands with the specific test software "TERATERM" are used to set the product:

- "EMTA62-3\_WiFi\_5G\_Commandes\_Nat\_2.docx"
- "EMTA62-3\_WiFi\_5G\_Commandes\_With\_Beamforming\_Nat.docx"
- "NEW EMTA62-3\_WiFi\_5G\_Commandes\_Nat\_2.docx"
- "NEW EMTA62-3\_WiFi\_5G\_Commandes\_Nat\_2.docx"

## 2.3. EQUIPMENT LABELLING



Power supply n° 1



Power supply n° 2



L C I E




Power supply n° 3





Power supply n° 4





L C I E


  
MSO Part Number

  
SGCSM

  
STB MAC:

  
eCM MAC

  
eMTA MAC:

  
eRouter MAC

**SAGEMCOM**  
DGC1384 UHD Ait US  
253697282 – A01

**FC** Tested To Comply With  
FCC Standards

**FCC ID: VW3DGC1384**


**UL LISTED**  
I.T.E.  
E308616

This device complies with Part 15 of the  
FCC Rules. Operation is subject to the following two  
conditions: (1) This device may not cause  
harmful interference, and (2) This device must  
accept any interference received, including  
interference that may cause undesired operation.

**Wi-Fi Network Configuration**

Network name (SSID)

Security key

  
CA SIN: 22429047792

Final market plate for example

**2.4. EQUIPMENT MODIFICATION**

None       Modification:

### 3. OCCUPIED BANDWIDTH

#### 3.1. TEST CONDITIONS

Test performed by : Mathieu CERISIER  
Date of test : November 16, 2016  
Ambient temperature : 25 °C  
Relative humidity : 41 %

#### 3.2. TEST SETUP

- The Equipment Under Test is installed:

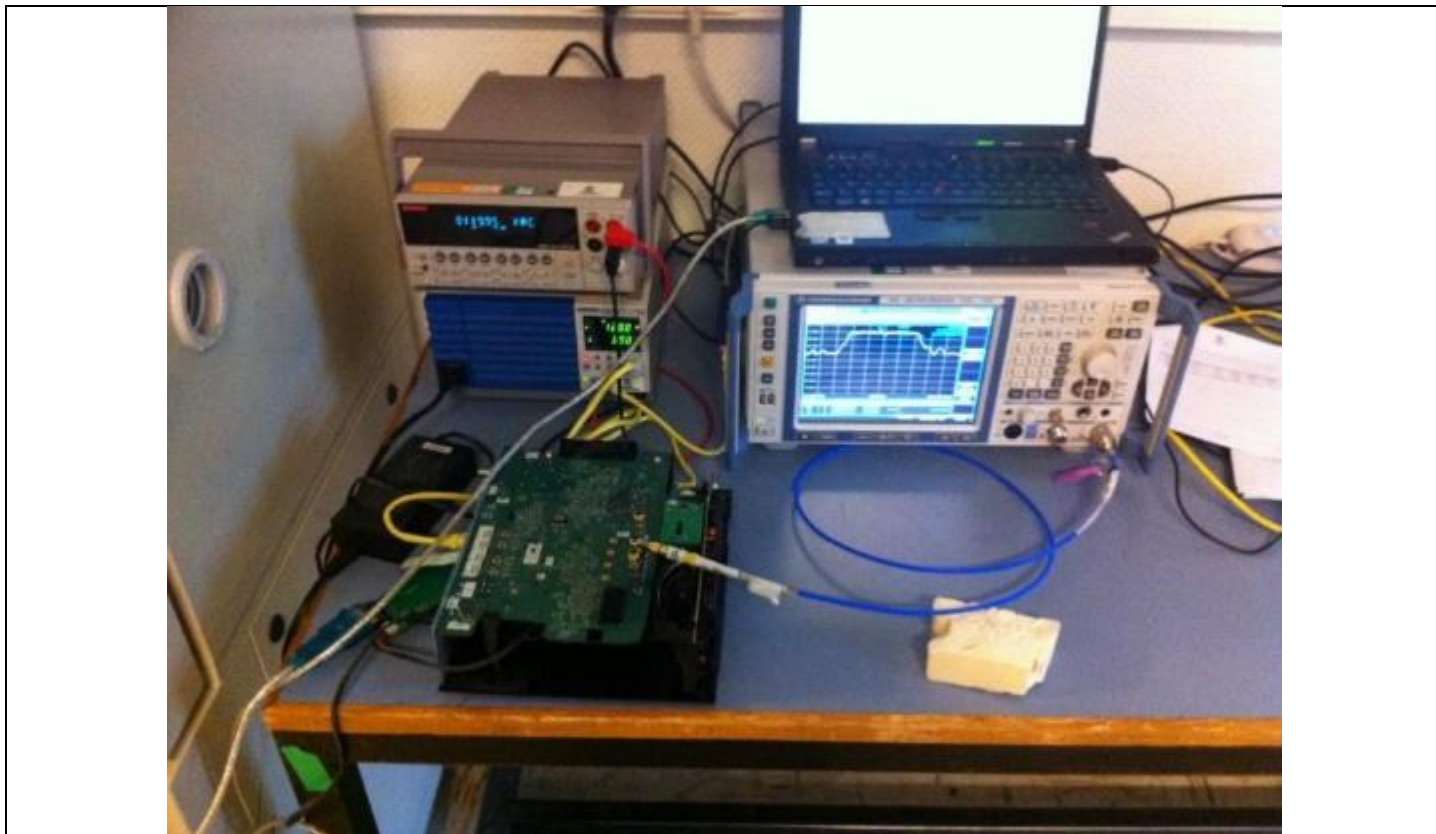
- On a table
- In an anechoic chamber

- Measurement is performed with a spectrum analyzer in:

- Conducted Method
- Radiated Method

- Test Procedure:

- KDB 789033 D02 General UNII Test Procedures New Rules v01r02 § D



Photograph for Occupied bandwidth



### 3.1. LIMIT

None

### 3.2. TEST EQUIPMENT LIST

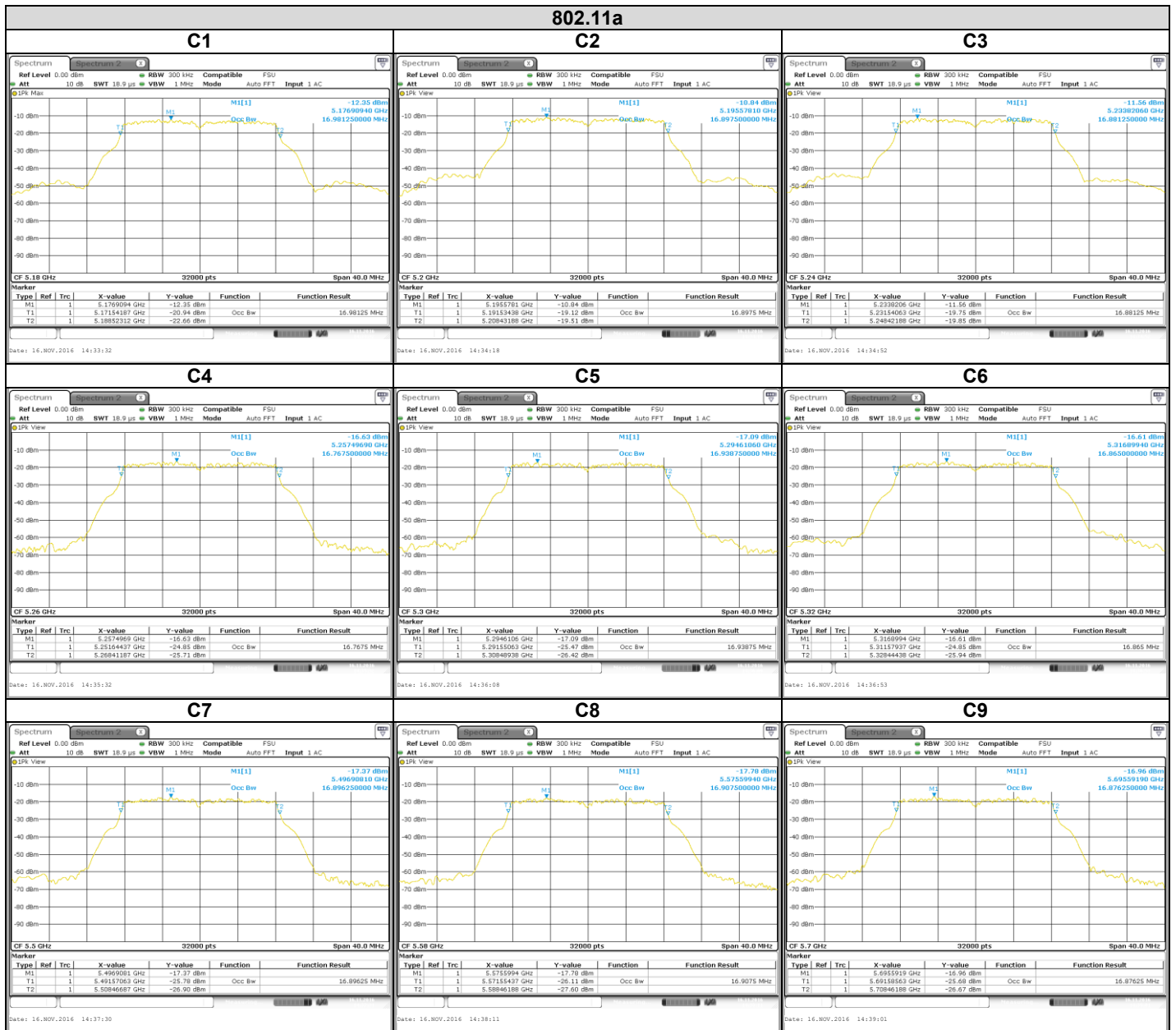
DESCRIPTION	MANUFACTURER	MODEL	N° LCIE	Cal_Date	Cal_Due
Multi-meter	KEITHLEY	2000	A1241084	2016/05	2018/05
Programmable AC/DC power supply	-; KIKUSUI	PCR500M	A7040079	Verified with calibrated multimeter	Verified with calibrated multimeter
EMI receiver	ROHDE & SCHWARZ	ESR 7	A2642023	2016/03	2017/03
RF cable & 20 dB attenuator	Télédynne	920-0202-048	A5329674	2016/10	2017/10

Note: In our quality system, the test equipment calibration due is more & less 2 months



L C I E

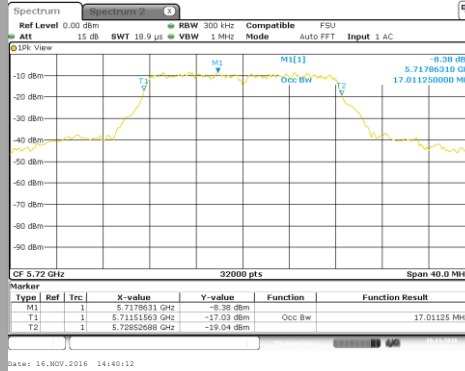
### 3.3. RESULTS



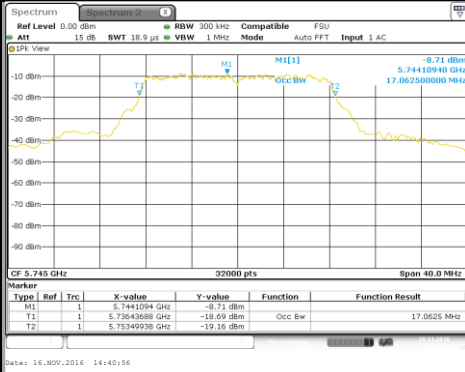


L C I E

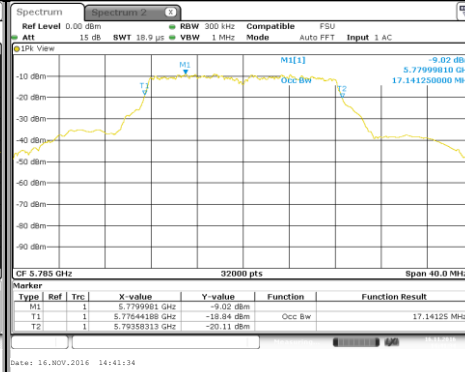
802.11a  
C10



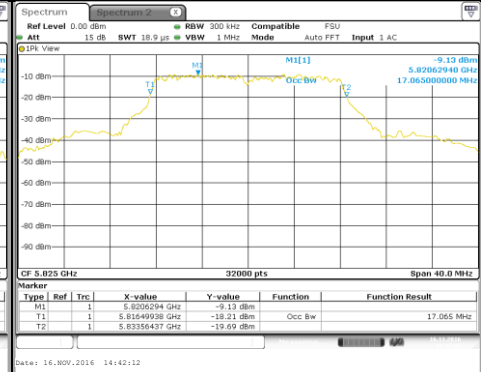
C11



C12



C13



Channel

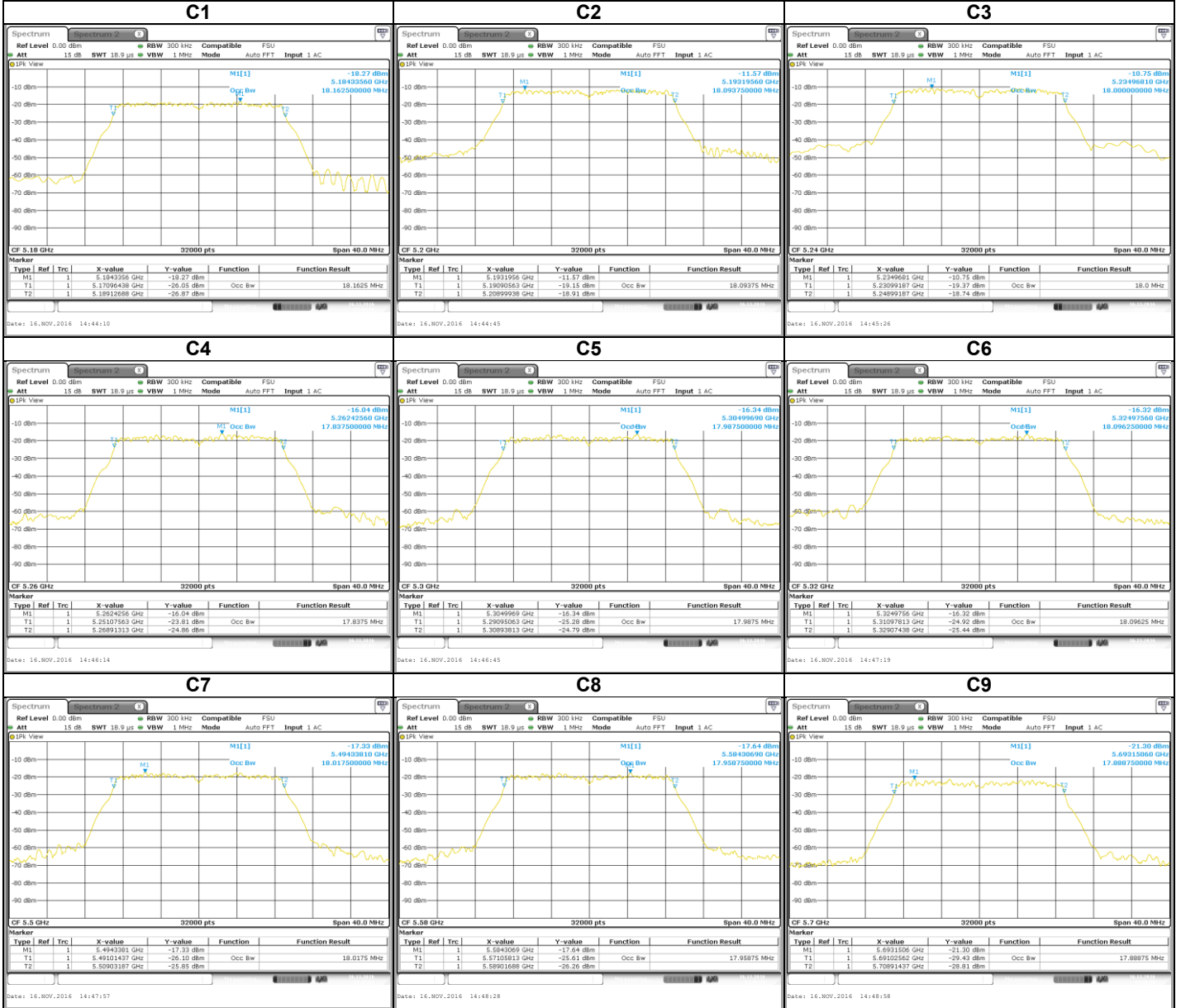
Occupied Channel Bandwidth (MHz)

C1	16,98
C2	16,9
C3	16,88
C4	16,77
C5	16,94
C6	16,87
C7	16,9
C8	16,91
C9	16,88
C10	17,01
C11	17,06
C12	17,14
C13	17,06



LCIE

### 802.11n HT20/ac VHT20



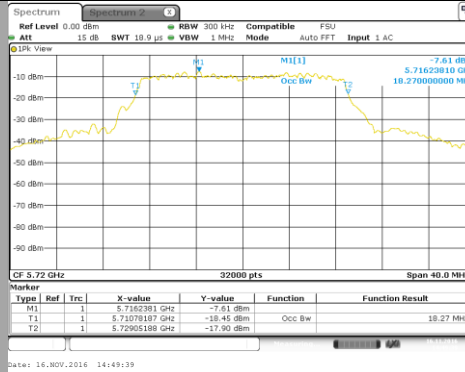




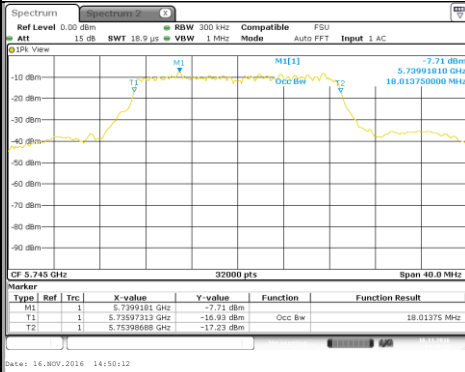
L C I E

802.11n HT20/ac VHT20

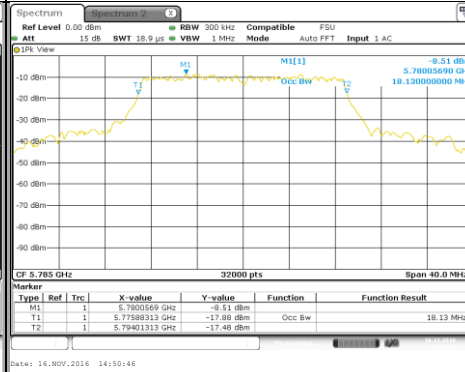
C10



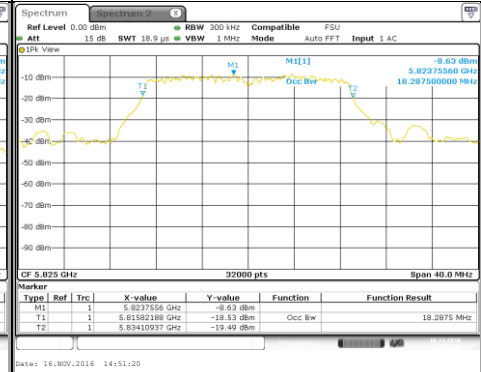
C11



C12



C13



Channel

Occupied Channel Bandwidth (MHz)

C1  
C2  
C3  
C4  
C5  
C6  
C7  
C8  
C9  
C10  
C11  
C12  
C13

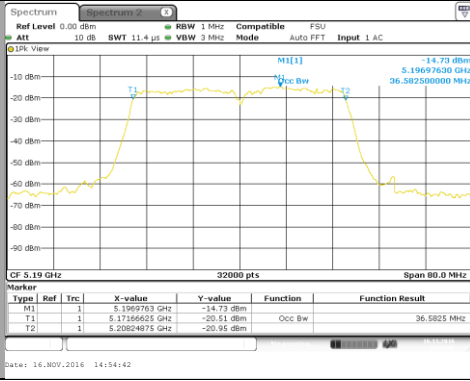
18,16  
18,09  
18  
17,84  
17,99  
18,1  
18,02  
17,96  
17,89  
18,27  
18,01  
18,13  
18,29



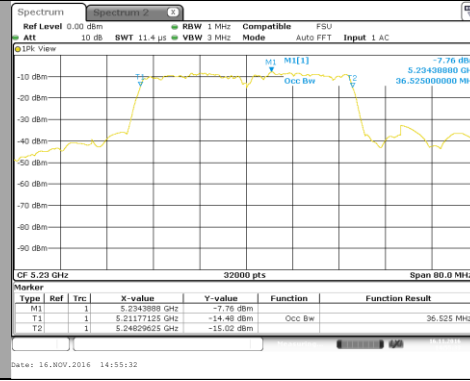
L C I E

### 802.11n HT40/ac VHT40

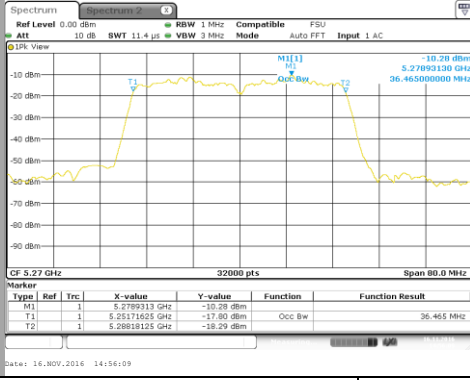
#### C14



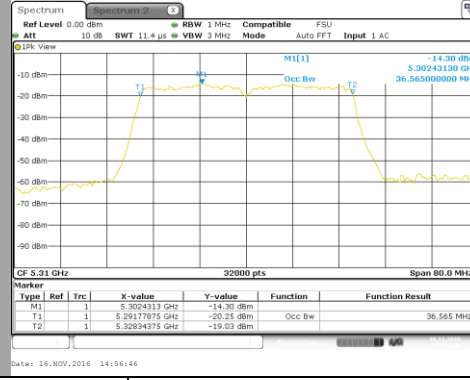
#### C15



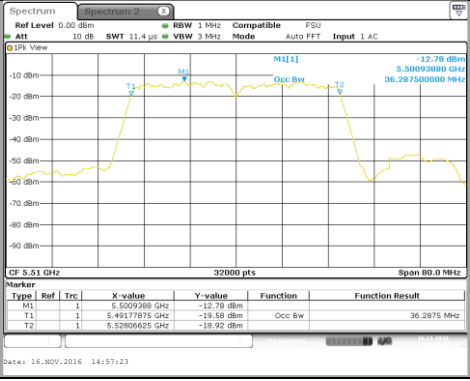
#### C16



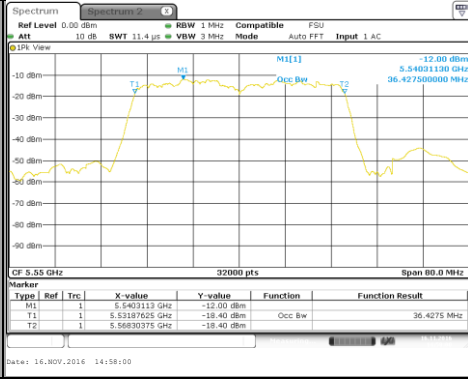
#### C17



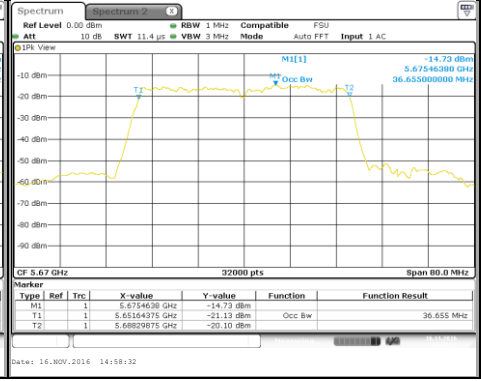
#### C18



#### C19



#### C20

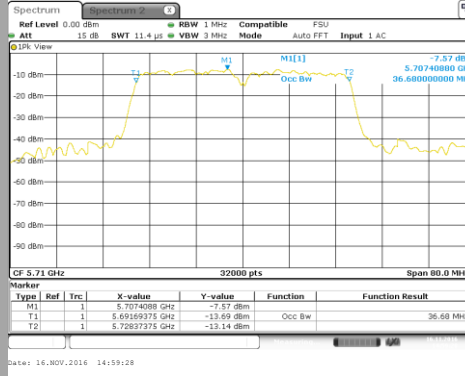




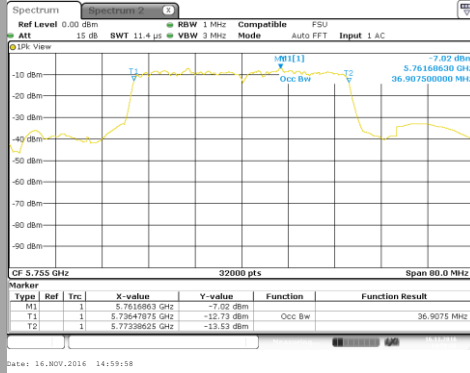
L C I E

802.11n HT40/ac VHT40

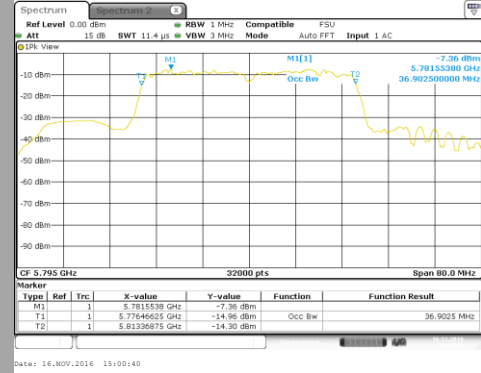
C21



C22



C23



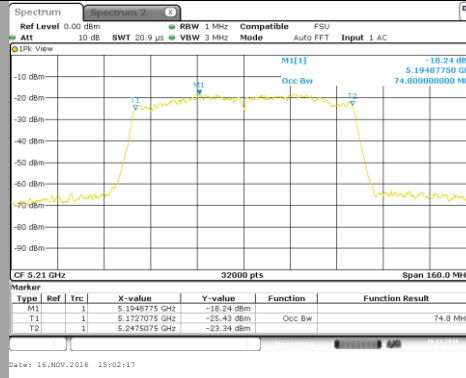
Channel	Occupied Channel Bandwidth (MHz)
C14	36,58
C15	36,53
C16	36,47
C17	36,57
C18	36,29
C19	36,43
C20	36,66
C21	36,68
C22	36,91
C23	36,9



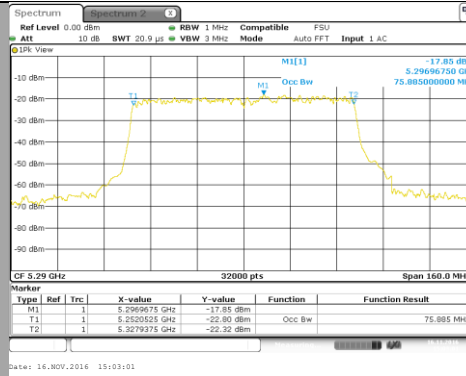
L C I E

### 802.11ac VHT80

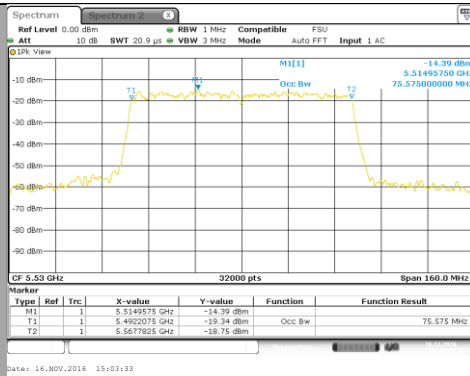
#### C24



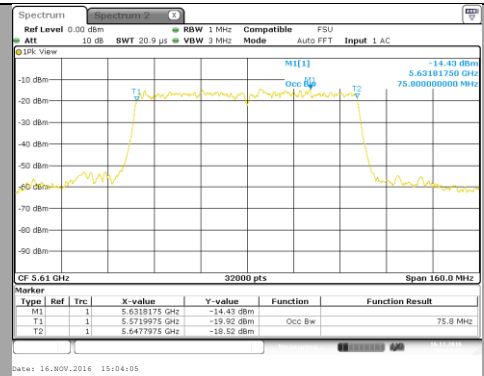
#### C25



#### C26



#### C27

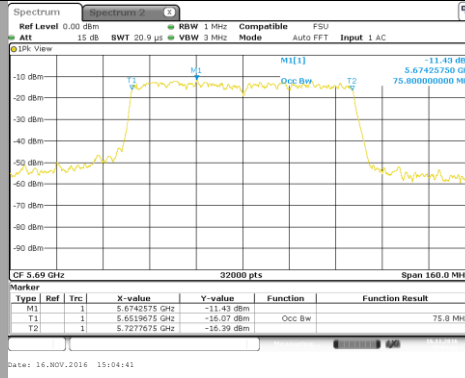




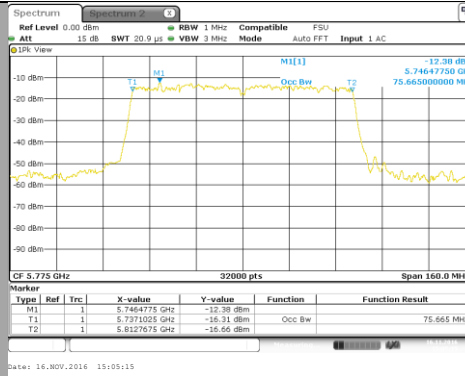
L C I E

802.11ac VHT80

C28



C29



Channel	Occupied Channel Bandwidth (MHz)
C24	74,8
C25	75,89
C26	75,58
C27	75,8
C28	75,8
C29	75,67

3.1. CONCLUSION

Occupied Channel Bandwidth measurement performed on the sample of the product **SAGEMCOM TheBox (253697282)**, SN: **616400107098**, in configuration and description presented in this test report, show levels compliant to the **47 CFR PART 15.407** limits.

## 4. CARRIER FREQUENCIES

### 4.1. TEST CONDITIONS

Test performed by : Mathieu CERISIER  
Date of test : November 30, 2016  
Ambient temperature : 22 °C  
Relative humidity : 37 %

### 4.2. TEST SETUP

- The Equipment under Test is installed:

- In the climatic chamber
- On a table
- In an anechoic chamber

-Measurement is performed with a spectrum analyzer

- On the EUT conducted access
- With a test fixture

-Method of measurement

- Unmodulated (Spectrum Analyzer Counter Function)
- Modulated (Spectrum Analyzer NdB down Function)

In case of smart antenna systems operating in a multiple transmit chains active simultaneously, the measurement is only performed on one of the active transmit chains.



Photograph for Carrier Frequencies



#### 4.3. LIMIT

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the users manual.

#### 4.4. TEST EQUIPMENT LIST

DESCRIPTION	MANUFACTURER	MODEL	N° LCIE	Cal_Date	Cal_Due
Multi-meter	KEITHLEY	2000	A1241084	2016/05	2018/05
Programmable AC/DC power supply	-; KIKUSUI	PCR500M	A7040079	Verified with calibrated multimeter	Verified with calibrated multimeter
EMI receiver	ROHDE & SCHWARZ	ESR 7	A2642023	2016/03	2017/03
RF cable & 20 dB attenuator	Télédyne	920-0202-048	A5329674	2016/10	2017/10
Climatic chamber	SECASI Technologies	SLT-34	D1024029	Verified with calibrated Thermometer	Verified with calibrated Thermometer
Thermometer	AOIP	TM 6630	B4041042	2016/09	2018/03

Note: In our quality system, the test equipment calibration due is more & less 2 months

#### 4.5. DIVERGENCE, ADDITION OR SUPPRESSION ON THE TEST SPECIFICATION

None       Divergence:



L C I E

### 4.6. RESULTS







L C I E

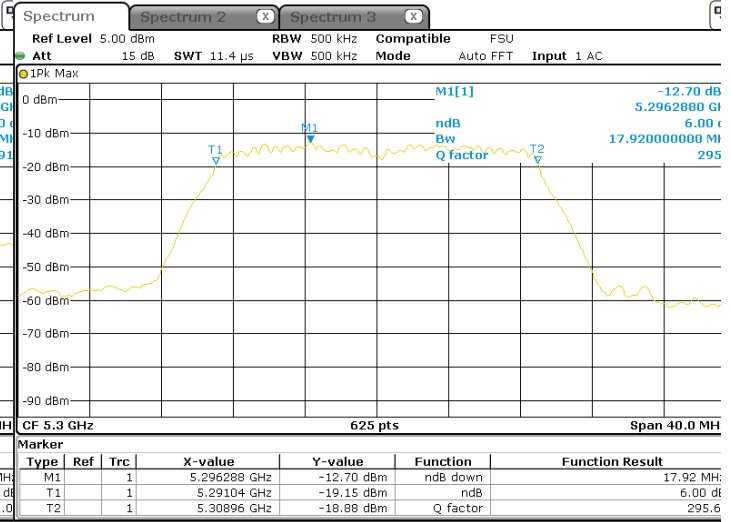
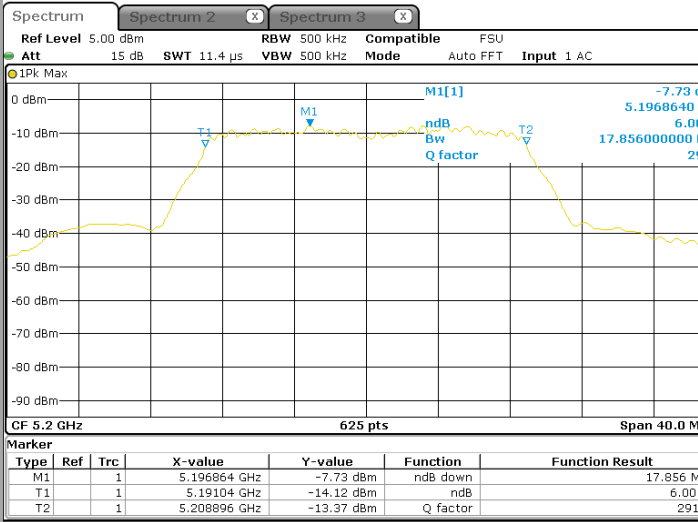
802.11a/802.11nHT20/ac VHT20

Tmin

Vnom

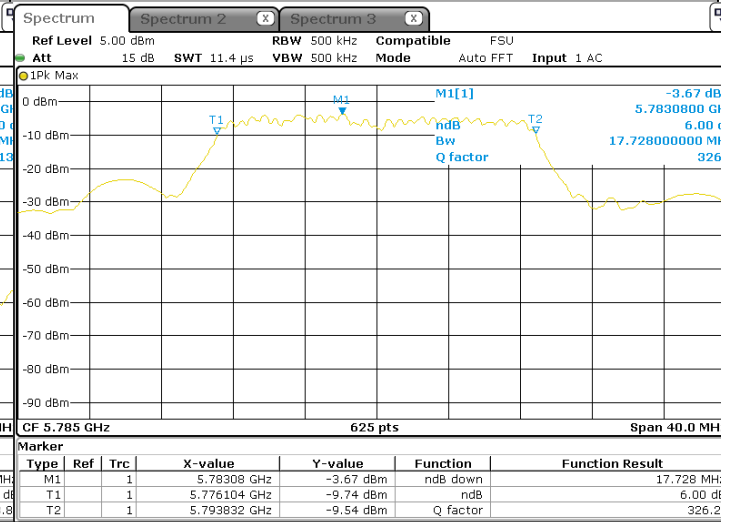
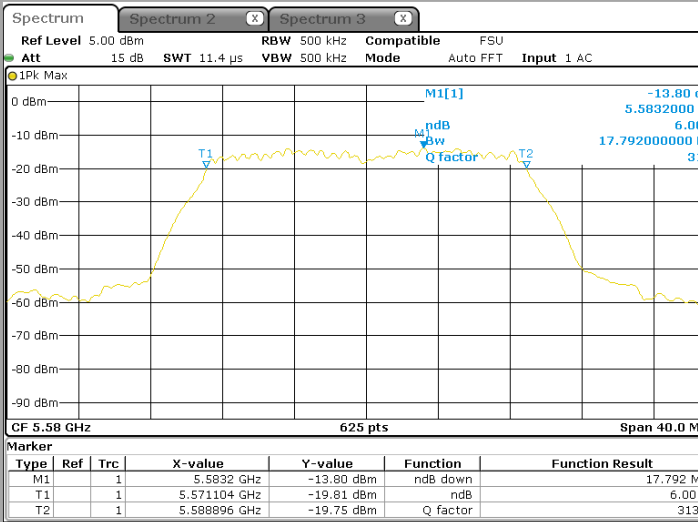
C2

C5



C8

C12





L C I E

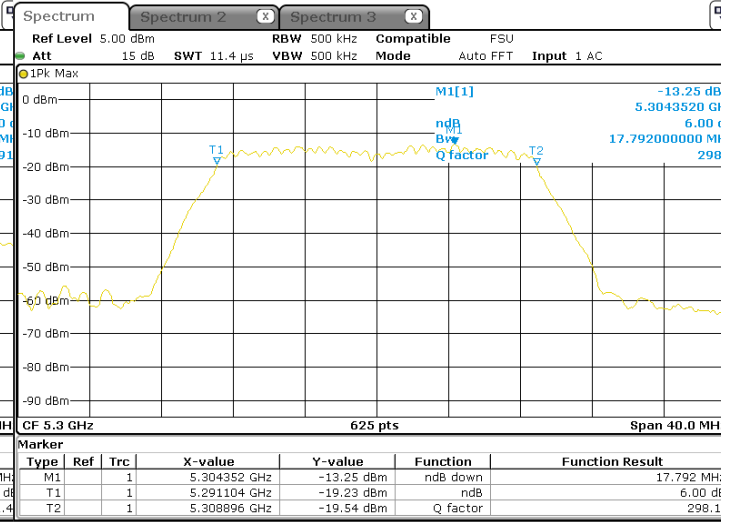
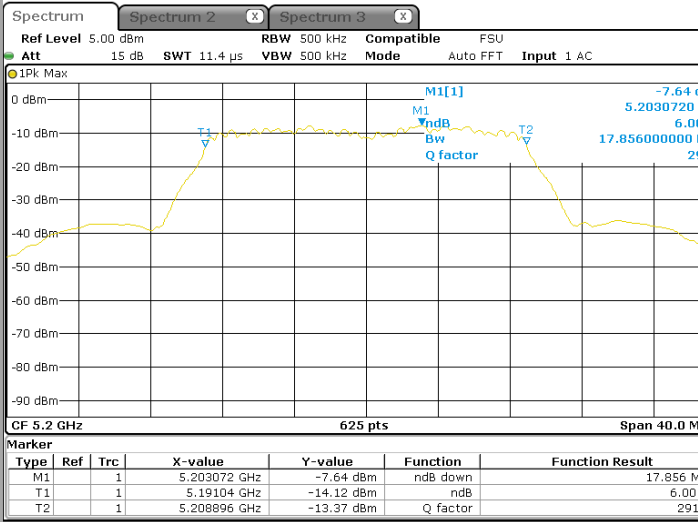
### 802.11a/802.11nHT20/ac VHT20

Tmin

Vmax

C2

C5

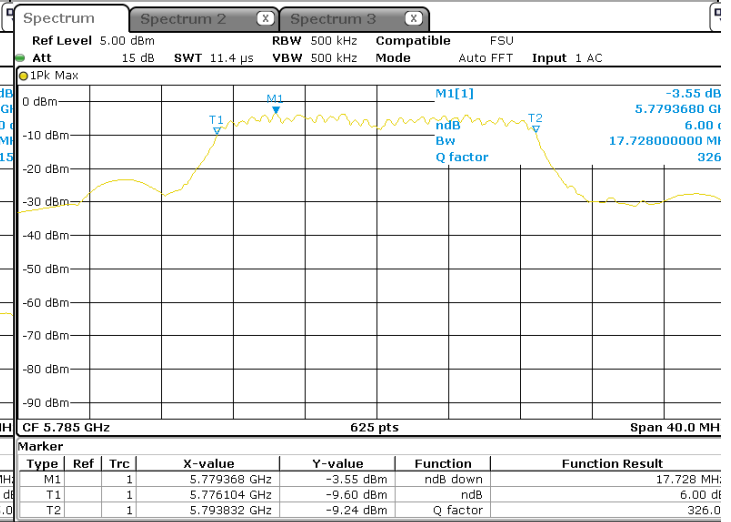
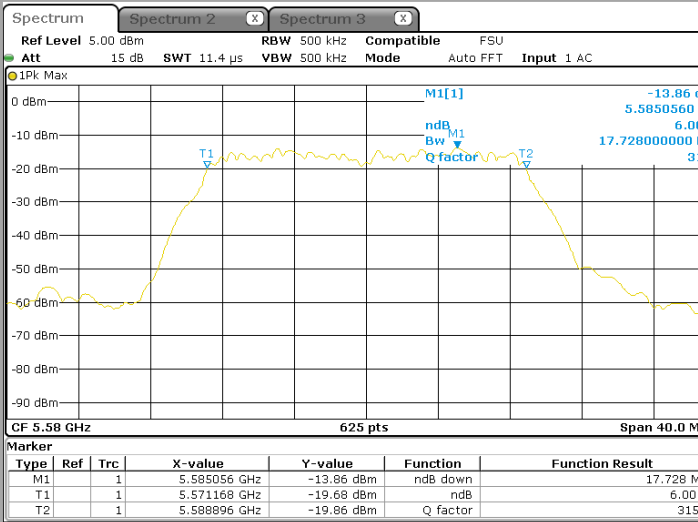


Date: 30.NOV.2016 13:46:37

Date: 30.NOV.2016 13:48:27

C8

C12



Date: 30.NOV.2016 13:50:50

Date: 30.NOV.2016 13:52:53



L C I E

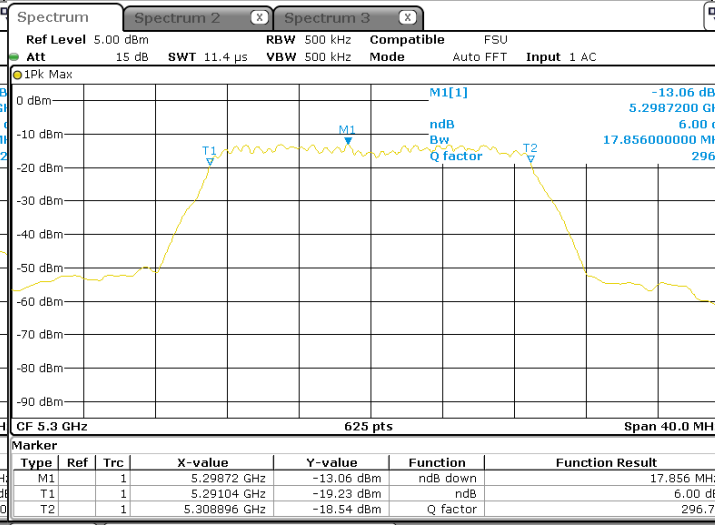
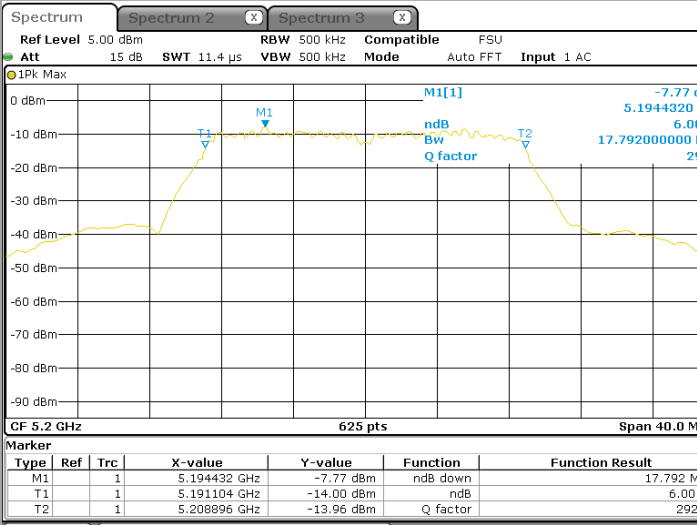
### 802.11a/802.11nHT20/ac VHT20

Tnom

Vmin

C2

C5

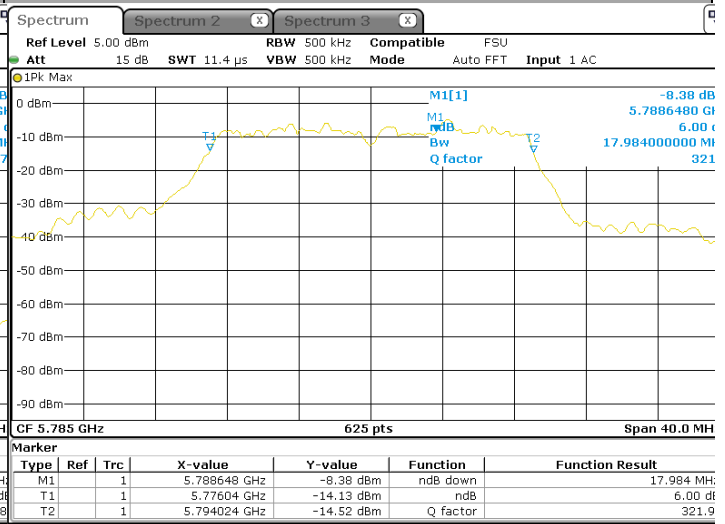
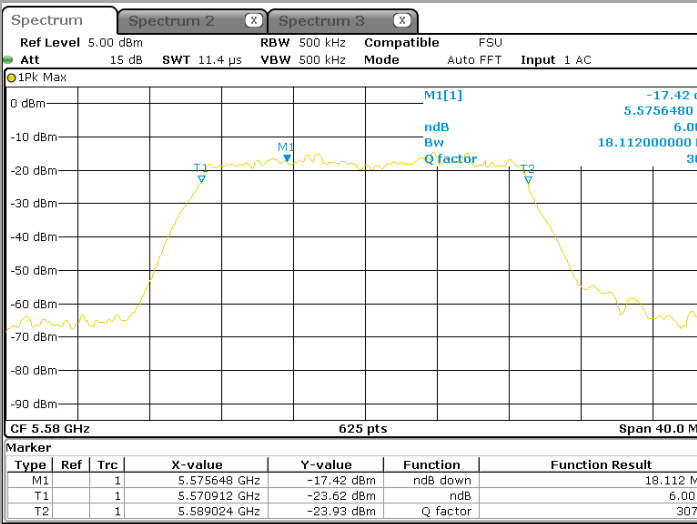


Date: 30.NOV.2016 13:05:51

Date: 30.NOV.2016 13:09:20

C8

C12



Date: 30.NOV.2016 13:10:38

Date: 30.NOV.2016 13:15:00



L C I E

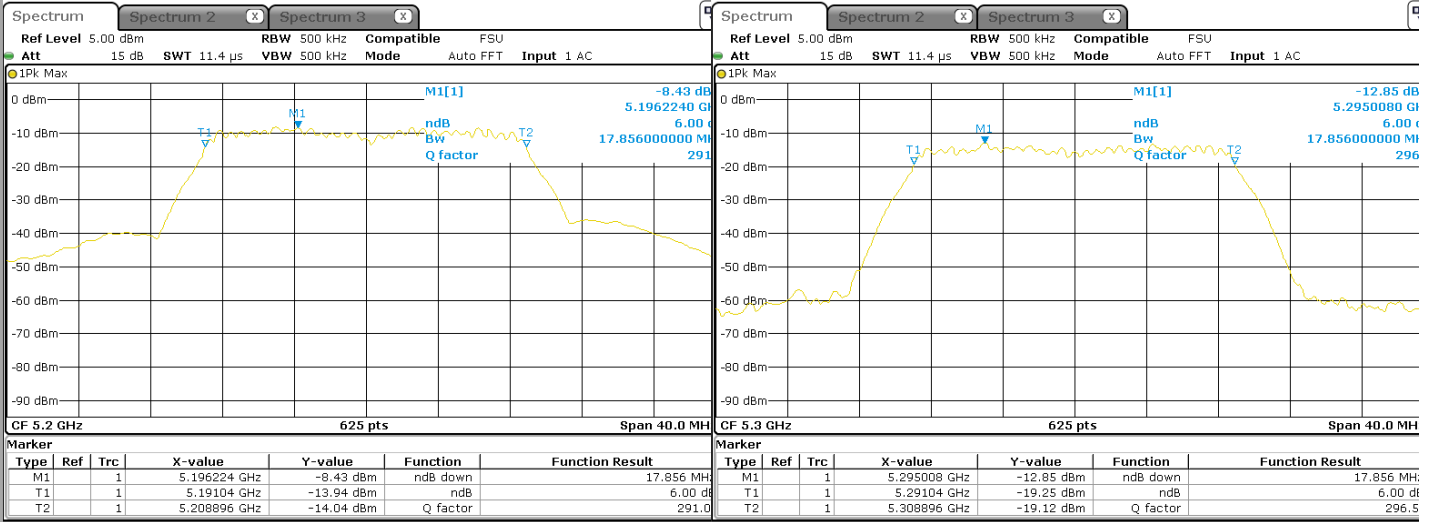
### 802.11a/802.11nHT20/ac VHT20

Tnom

Vnom

C2

C5

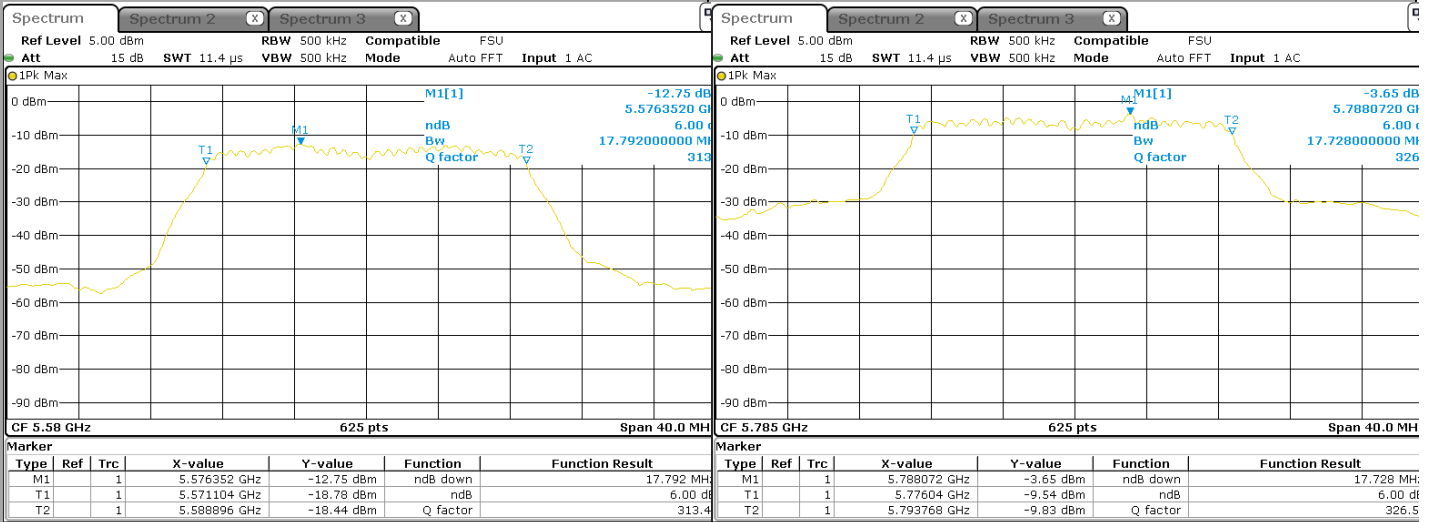


Date: 30.NOV.2016 13:04:47

Date: 30.NOV.2016 13:08:27

C8

C12



Date: 30.NOV.2016 13:13:28

Date: 30.NOV.2016 13:15:31



L C I E

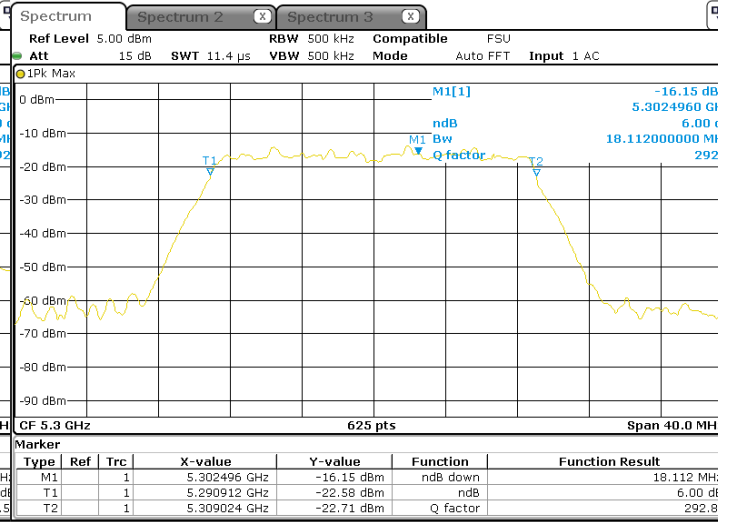
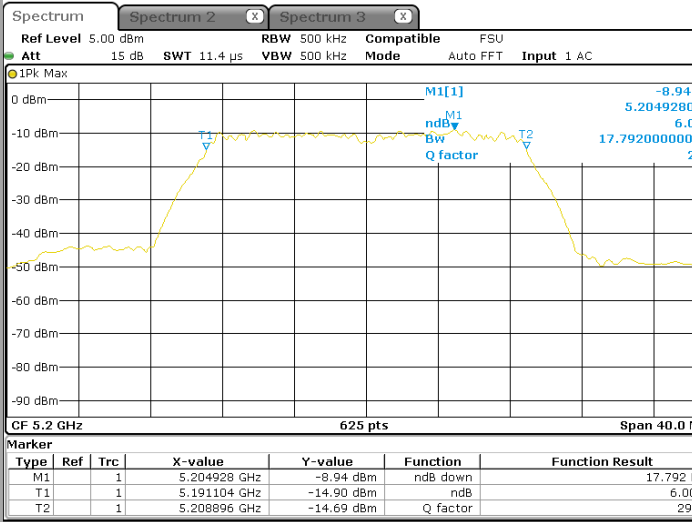
802.11a/802.11nHT20/ac VHT20

Tnom

Vmax

C2

C5

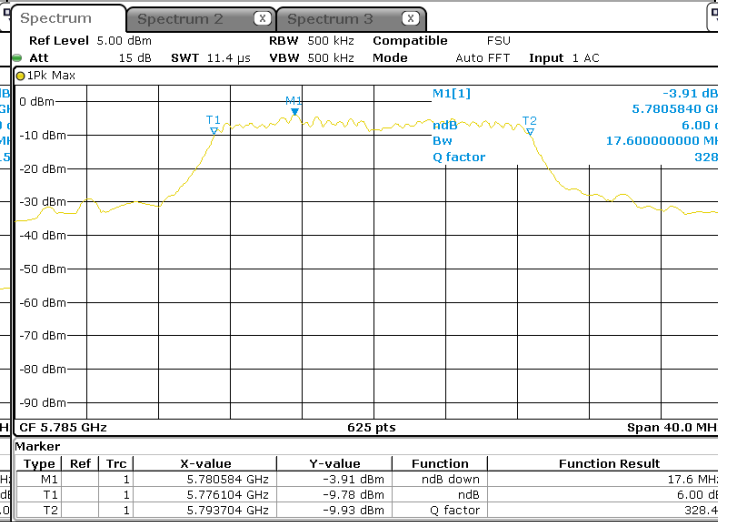
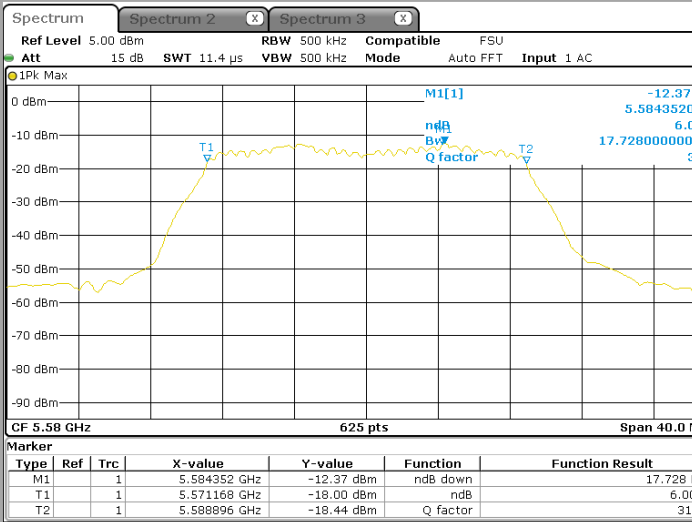


Date: 30.NOV.2016 13:06:47

Date: 30.NOV.2016 13:07:51

C8

C12



Date: 30.NOV.2016 13:13:53

Date: 30.NOV.2016 13:16:13



L C I E

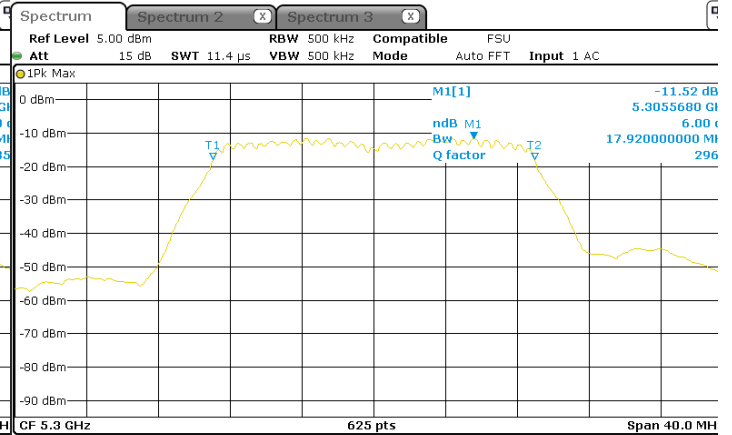
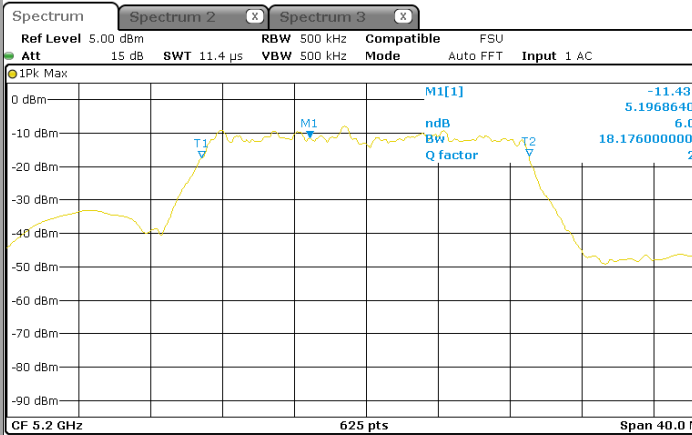
### 802.11a/802.11nHT20/ac VHT20

Tmax

Vmin

C2

C5

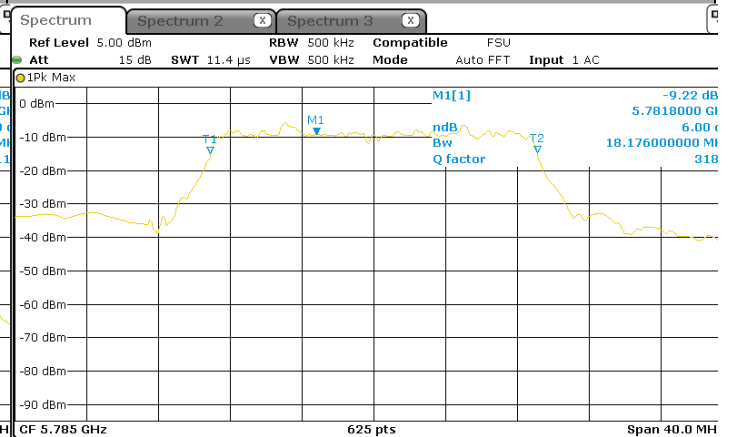
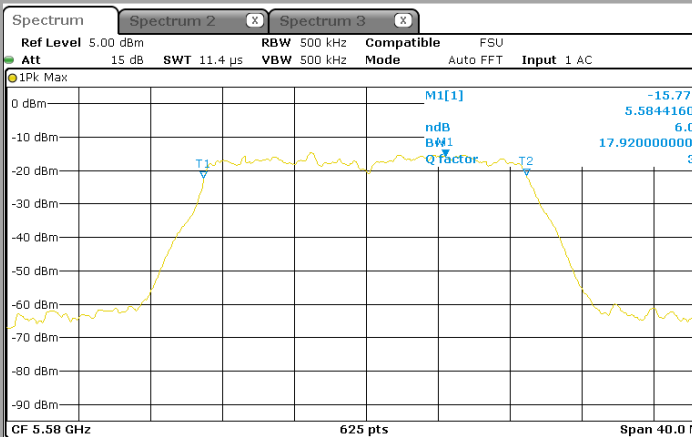


Date: 30.NOV.2016 14:12:00

Date: 30.NOV.2016 14:18:45

C8

C12



Date: 30.NOV.2016 14:21:40

Date: 30.NOV.2016 14:24:03



L C I E

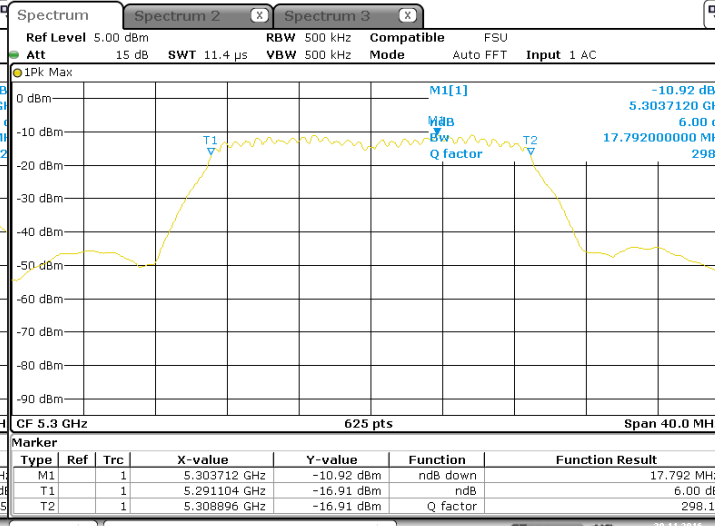
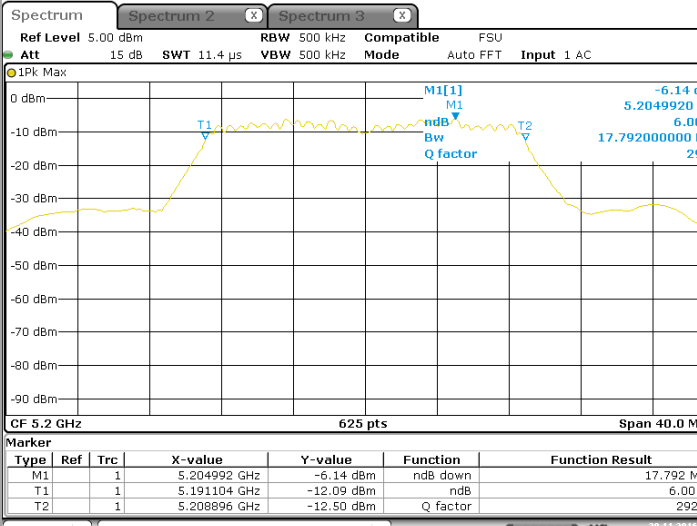
### 802.11a/802.11nHT20/ac VHT20

Tmax

Vnom

C2

C5

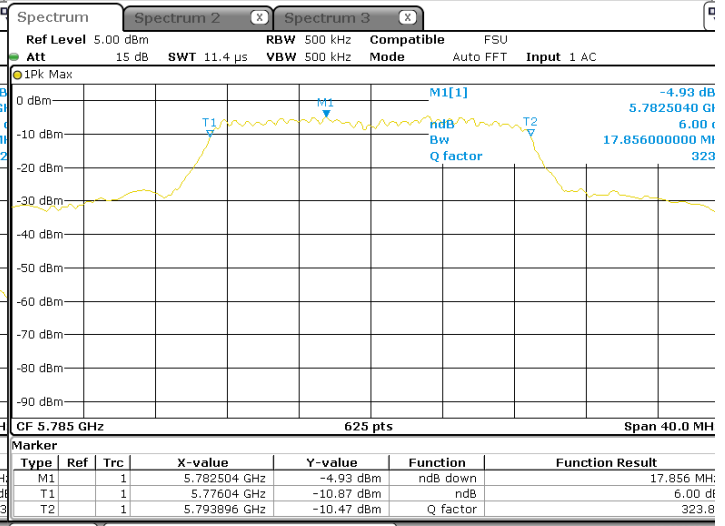
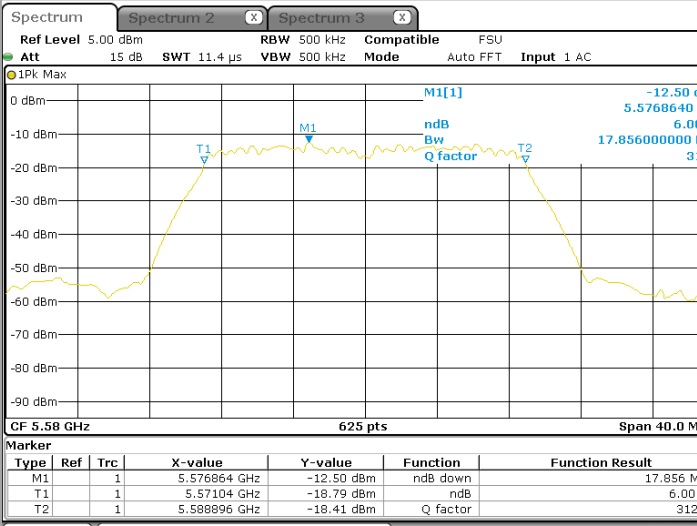


Date: 30.NOV.2016 14:16:17

Date: 30.NOV.2016 14:19:50

C8

C12



Date: 30.NOV.2016 14:22:08

Date: 30.NOV.2016 14:24:58



L C I E

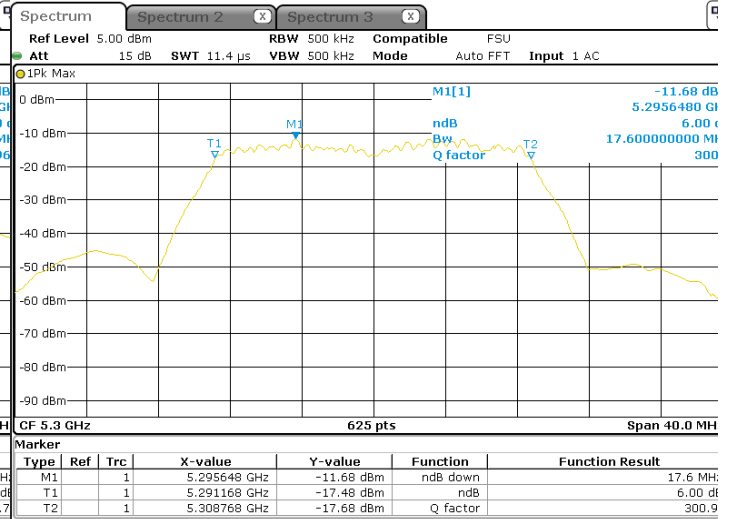
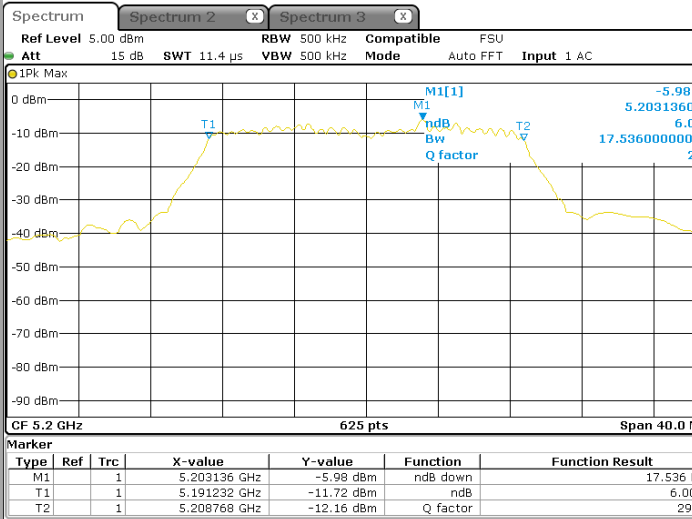
802.11a/802.11nHT20/ac VHT20

Tmax

Vmax

C2

C5

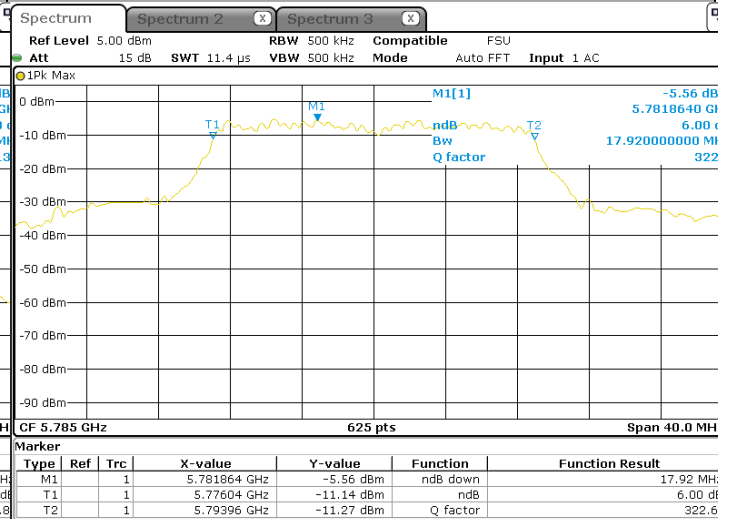
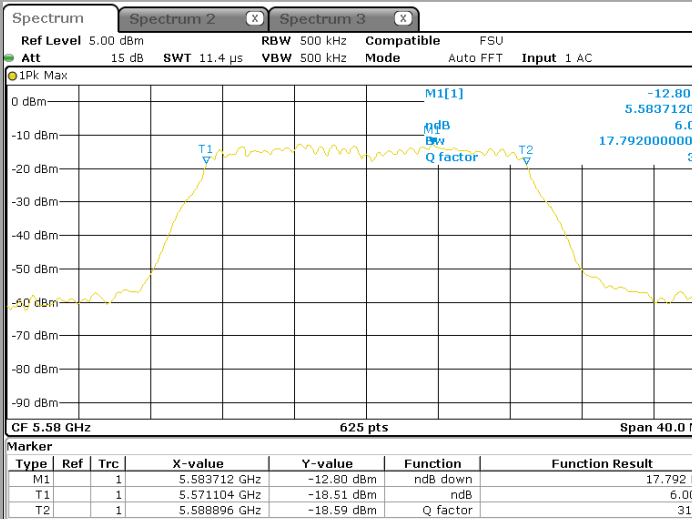


Date: 30.NOV.2016 14:16:59

Date: 30.NOV.2016 14:20:26

C8

C12



Date: 30.NOV.2016 14:23:11

Date: 30.NOV.2016 14:25:38





#### 802.11a/802.11nHT20/ac VHT20

Temperature	Tmin				Tnom				Tmax			
Voltage	Vmin											
Channel	C2	C5	C8	C12	C2	C5	C8	C12	C2	C5	C8	C12
Frequency drift (ppm)	0,0	-12,1	17,2	-5,5	0,0	-6,0	-5,7	5,5	-12,3	0,0	-11,5	0,0
Voltage	Vnom											
Channel	C2	C5	C8	C12	C2	C5	C8	C12	C2	C5	C8	C12
Frequency drift (ppm)	-6,2	0,0	0,0	-5,5	-6,2	-6,0	0,0	-16,6	0,0	0,0	-5,7	-5,5
Voltage	Vmax											
Channel	C2	C5	C8	C12	C2	C5	C8	C12	C2	C5	C8	C12
Frequency drift (ppm)	-6,2	0,0	5,7	-5,5	-6,2	-6,0	5,7	-16,6	0,0	-6,0	0,0	0,0

#### 4.7. CONCLUSION

Carrier frequencies measurement performed on the sample of the product **SAGEMCOM TheBox (253697282)**, SN: **616400107098** in configuration and description presented in this test report, show levels **compliant** to the 47 CFR PART 15.407 limits.

## 5. 26dB EMISSION BANDWIDTH

### 5.1. TEST CONDITIONS

Test performed by : Mathieu CERISIER  
Date of test : November 16, 2016  
Ambient temperature : 25 °C  
Relative humidity : 41 %

### 5.2. TEST SETUP

- The Equipment Under Test is installed:

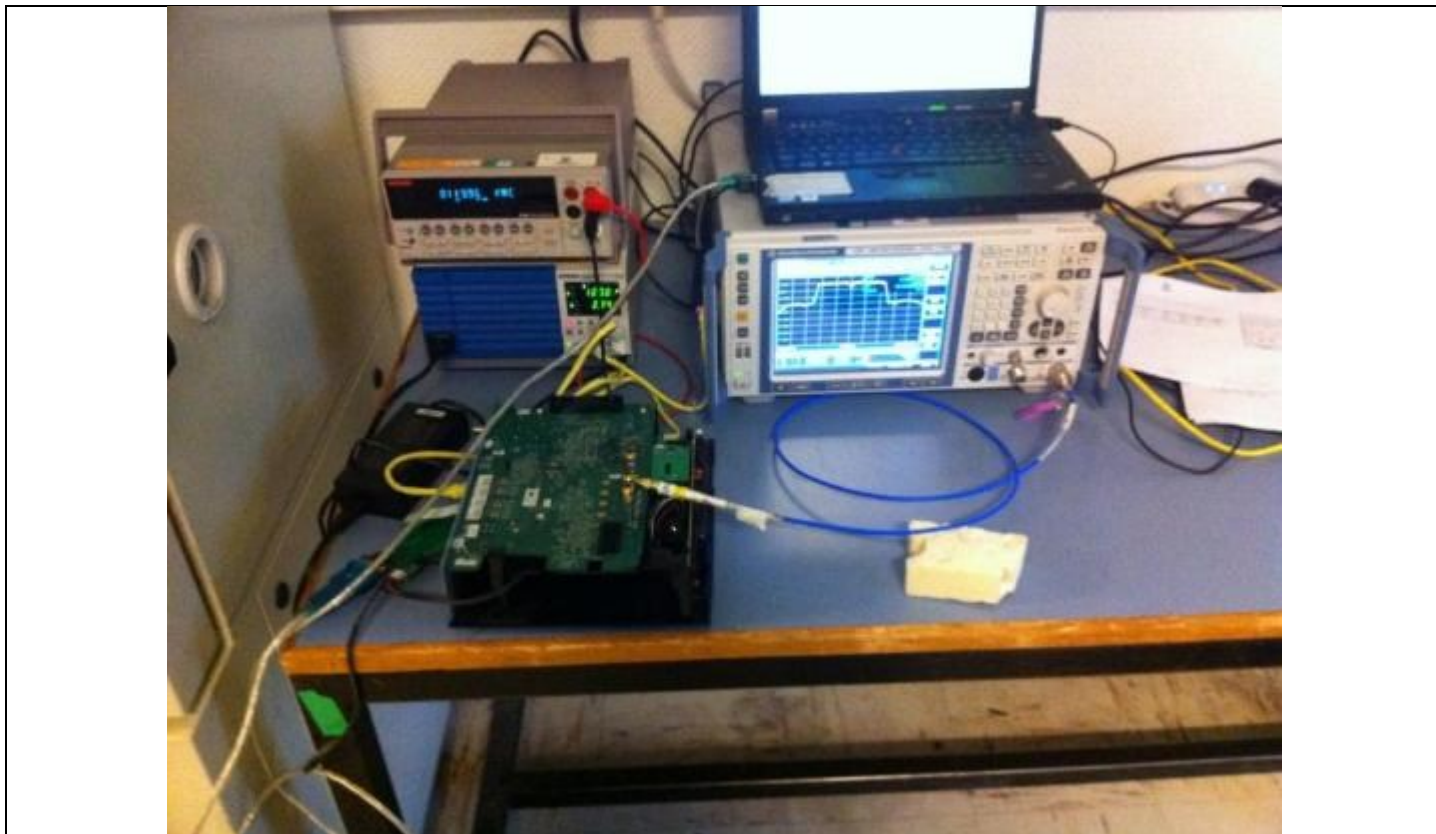
- On a table
- In an anechoic chamber

- Measurement is performed with a spectrum analyzer in:

- Conducted Method
- Radiated Method

- Test Procedure:

- KDB 789033 D02 General UNII Test Procedures New Rules v01r02 § C1



Photograph for 26dB emission bandwidth



### 5.3. LIMIT

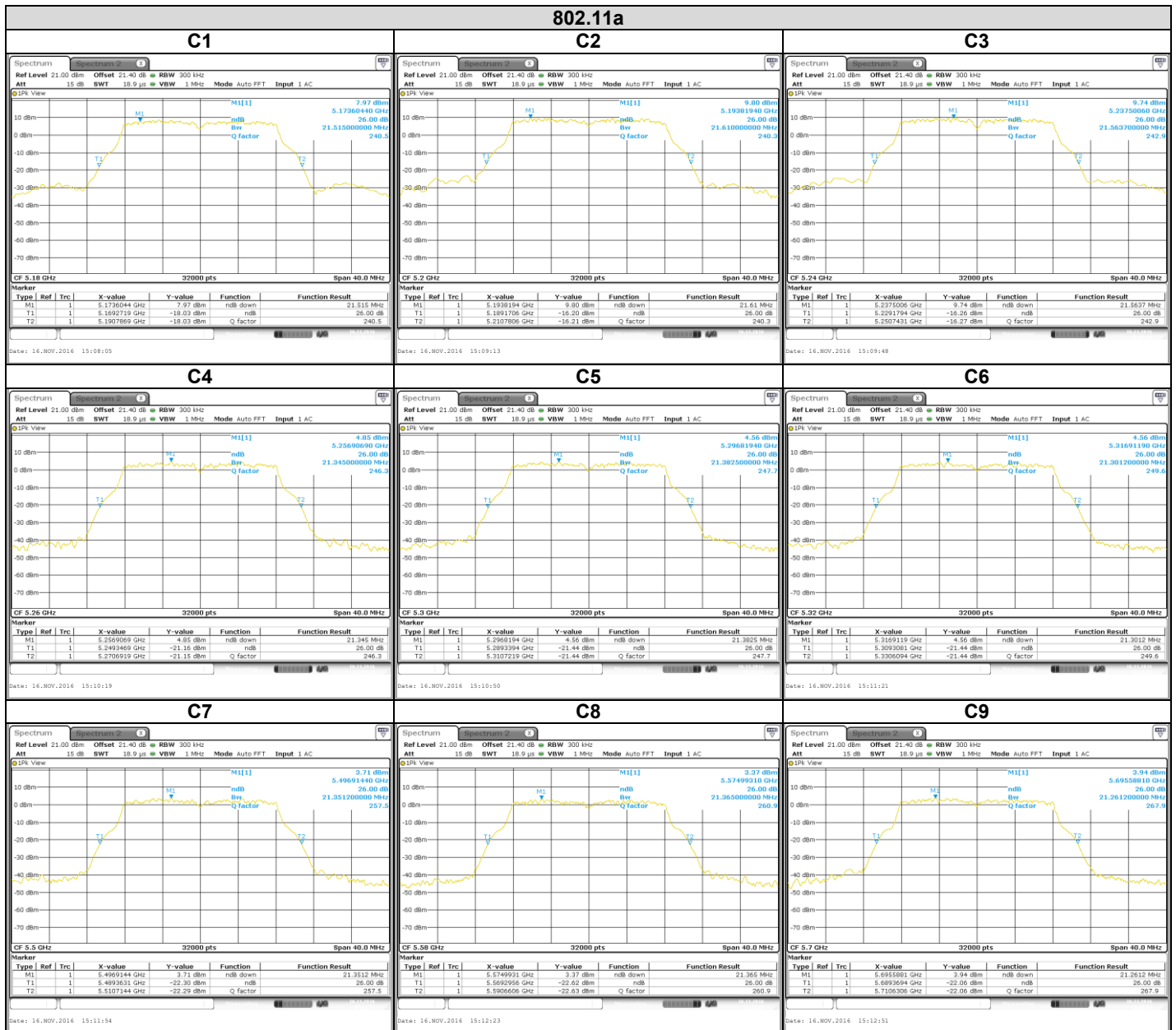
None

### 5.4. TEST EQUIPMENT LIST

DESCRIPTION	MANUFACTURER	MODEL	N° LCIE	Cal_Date	Cal_Due
Multi-meter	KEITHLEY	2000	A1241084	2016/05	2018/05
Programmable AC/DC power supply	-; KIKUSUI	PCR500M	A7040079	Verified with calibrated multimeter	Verified with calibrated multimeter
EMI receiver	ROHDE & SCHWARZ	ESR 7	A2642023	2016/03	2017/03
RF cable & 20 dB attenuator	Télédyne	920-0202-048	A5329674	2016/10	2017/10

Note: In our quality system, the test equipment calibration due is more & less 2 months

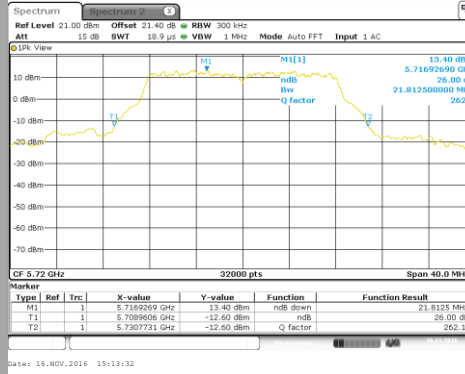
## 5.5. RESULTS





L C I E

802.11a  
C10

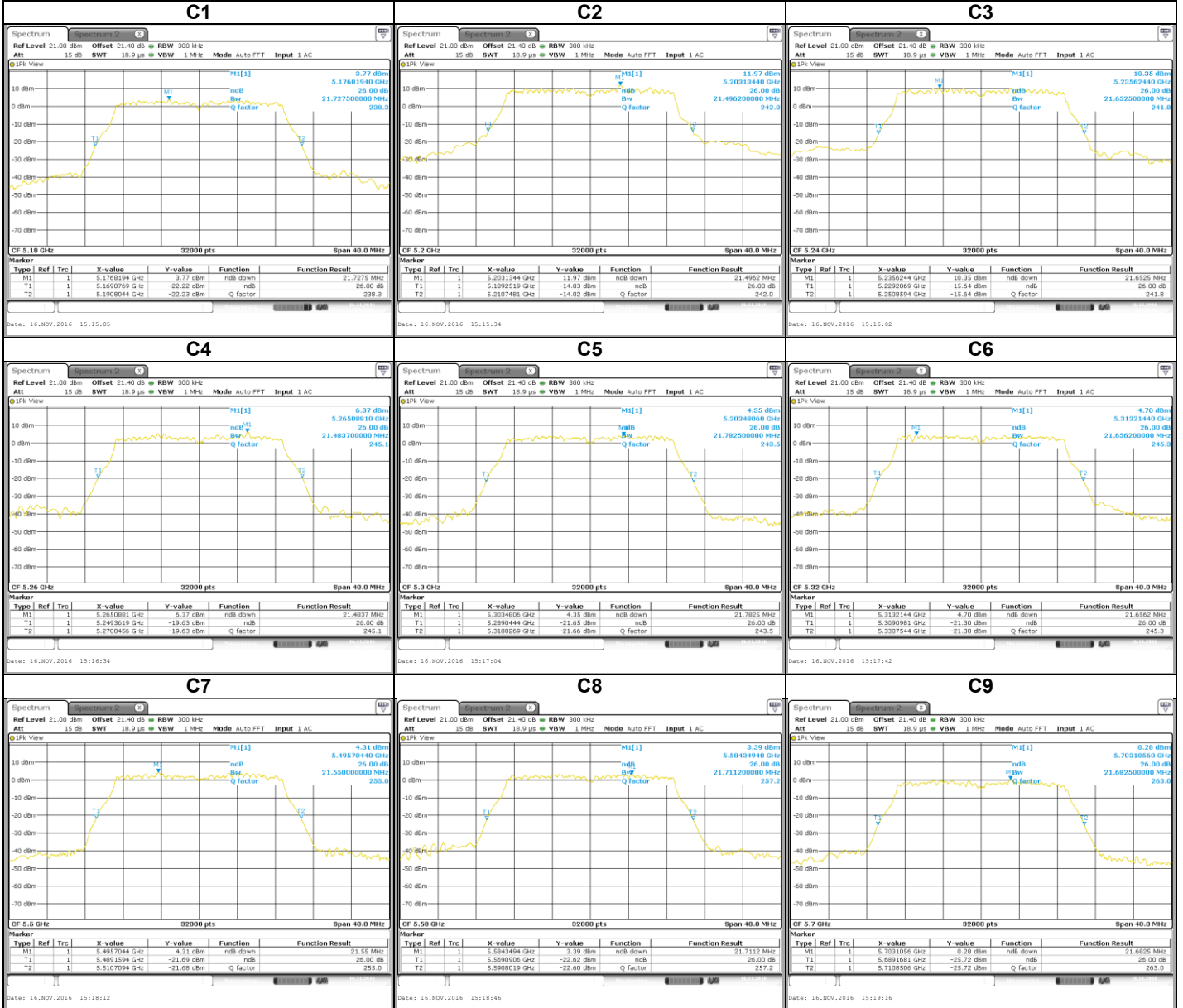


Channel	26dB Emission Bandwidth (MHz)
C1	21,52
C2	21,61
C3	21,56
C4	21,35
C5	21,39
C6	21,3
C7	21,35
C8	21,37
C9	21,26
C10	21,81



L C I E

### 802.11n HT20/ac VHT20

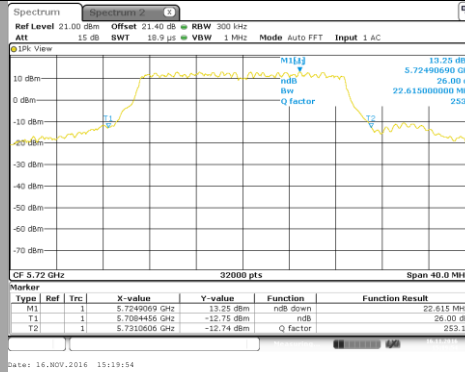




L C I E

802.11n HT20/ac VHT20

C10



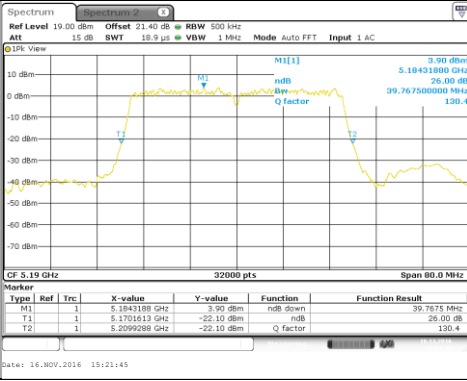
Channel	26dB Emission Bandwidth (MHz)
C1	21,73
C2	21,5
C3	21,65
C4	21,48
C5	21,78
C6	21,66
C7	21,55
C8	21,71
C9	21,68
C10	22,62



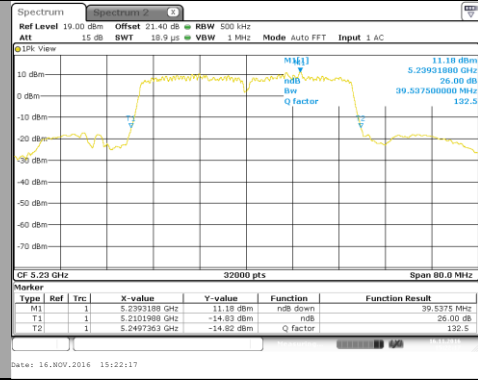
L C I E

### 802.11n HT40/ac VHT40

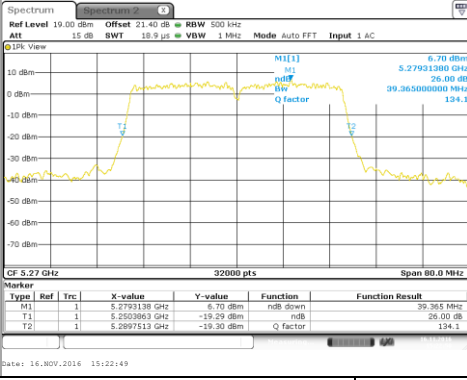
#### C14



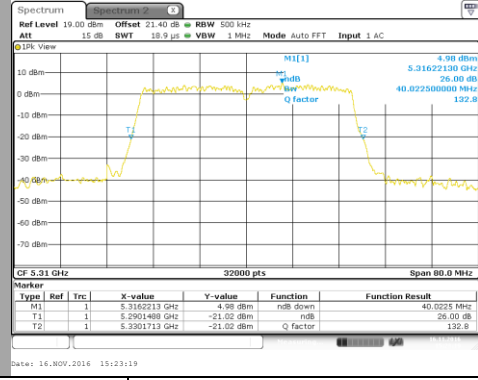
#### C15



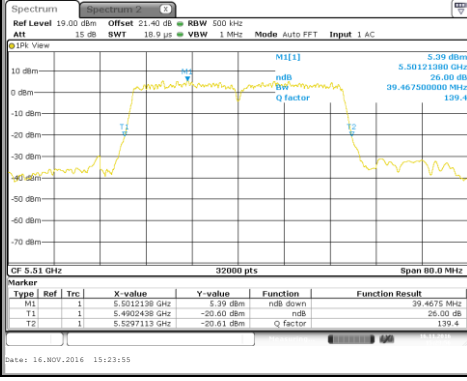
#### C16



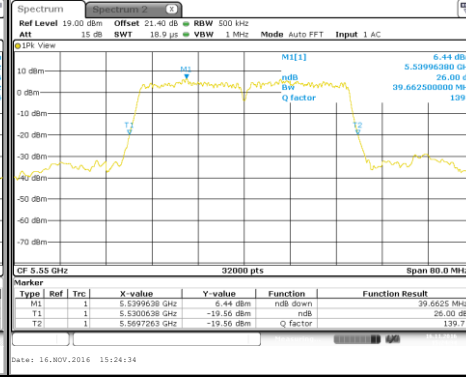
#### C17



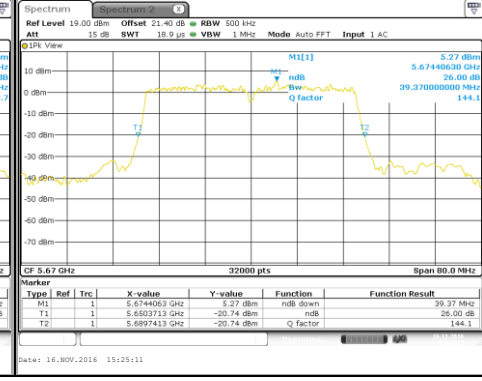
#### C18



#### C19



#### C20



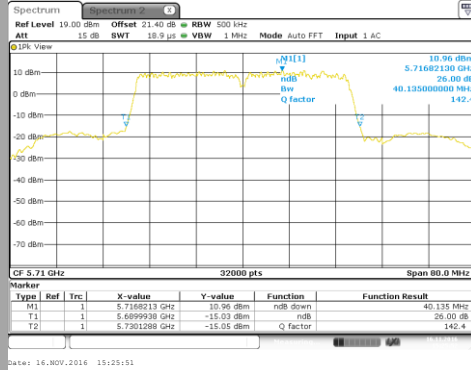




L C I E

802.11n HT40/ac VHT40

C21



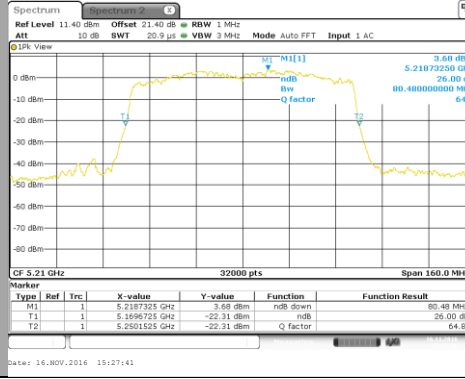
Channel	26dB Emission Bandwidth (MHz)
C14	39,77
C15	39,54
C16	39,37
C17	40,02
C18	39,47
C19	39,66
C20	39,37
C21	40,14



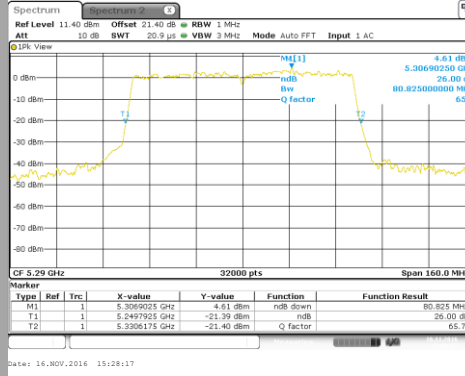
L C I E

### 802.11ac VHT80

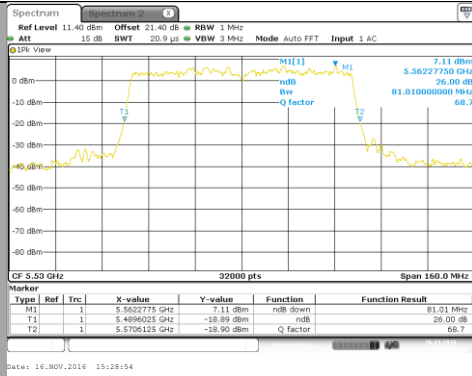
#### C24



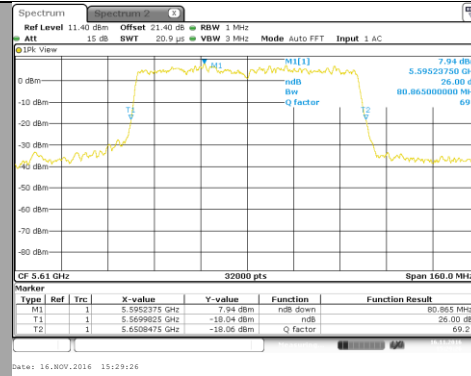
#### C25



#### C26



#### C27

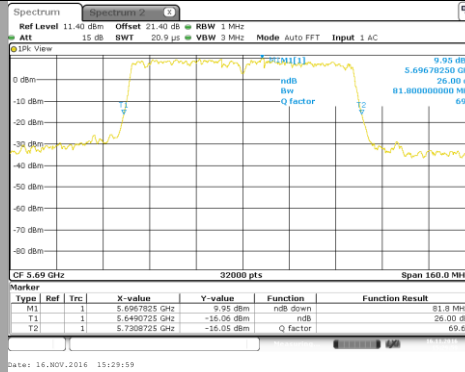




L C I E

802.11ac VHT80

C28



Channel	26dB Emission Bandwidth (MHz)
C24	80,48
C25	80,83
C26	81,01
C27	80,77
C28	81,8

5.6. CONCLUSION

26dB Emission Bandwidth measurement performed on the sample of the product **SAGEMCOM TheBox (253697282)**, SN: **616400107098** in configuration and description presented in this test report, show levels **compliant** to the **47 CFR PART 15.407** limits.

## 6. 6dB EMISSION BANDWIDTH

### 6.1. TEST CONDITIONS

Test performed by : Mathieu CERISIER  
Date of test : November 16, 2016  
Ambient temperature : 25 °C  
Relative humidity : 41 %

### 6.2. TEST SETUP

- The Equipment Under Test is installed:

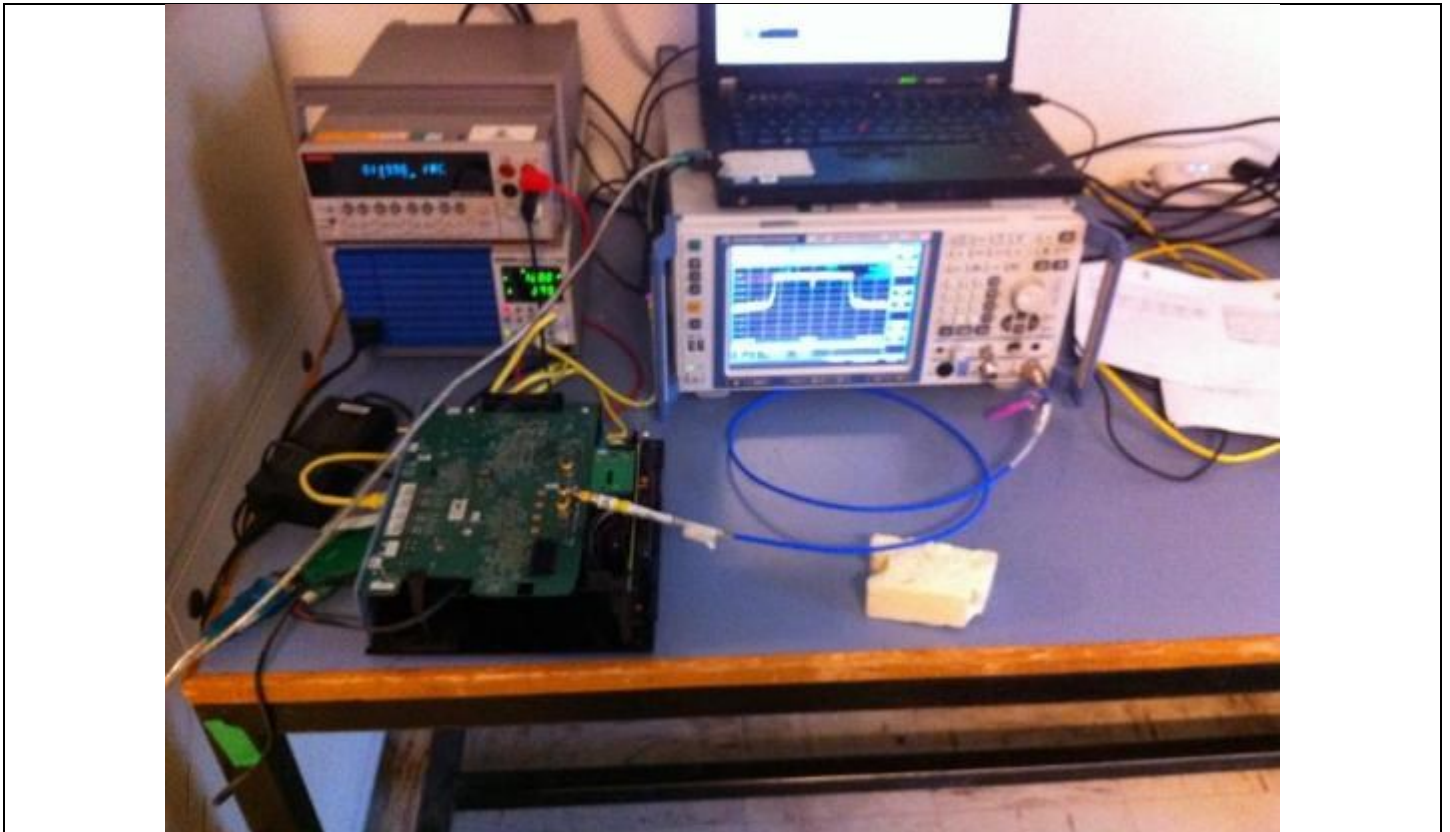
- On a table
- In an anechoic chamber

- Measurement is performed with a spectrum analyzer in:

- Conducted Method
- Radiated Method

- Test Procedure:

- KDB 789033 D02 General UNII Test Procedures New Rules v01r02 § C2



Photograph for 6dB emission bandwidth



### 6.3. LIMIT

The 6dB bandwidth shall be at least 500kHz

### 6.4. TEST EQUIPMENT LIST

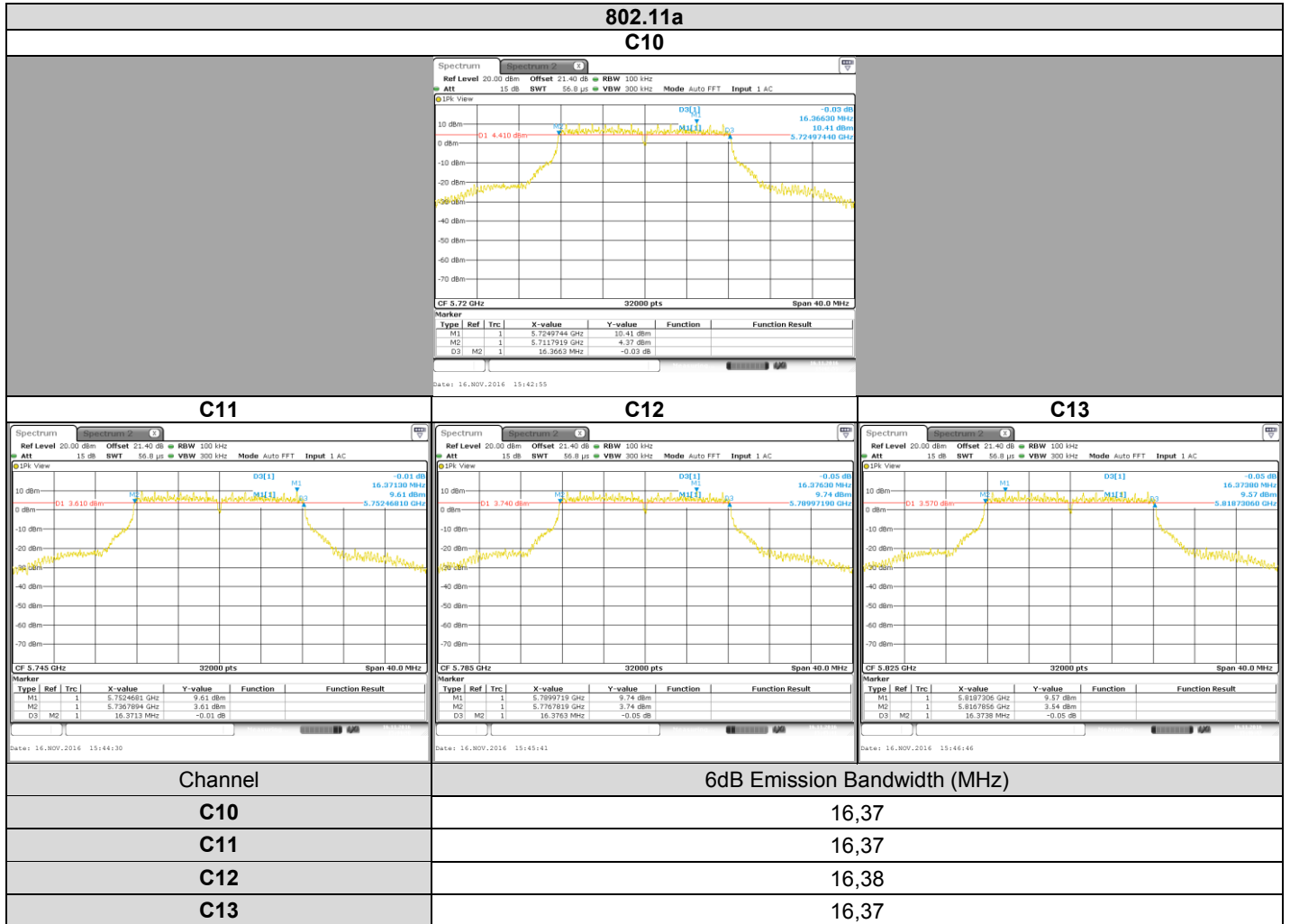
DESCRIPTION	MANUFACTURER	MODEL	N° LCIE	Cal_Date	Cal_Due
Multi-meter	KEITHLEY	2000	A1241084	2016/05	2018/05
Programmable AC/DC power supply	-; KIKUSUI	PCR500M	A7040079	Verified with calibrated multimeter	Verified with calibrated multimeter
EMI receiver	ROHDE & SCHWARZ	ESR 7	A2642023	2016/03	2017/03
RF cable & 20 dB attenuator	Télédyne	920-0202-048	A5329674	2016/10	2017/10

Note: In our quality system, the test equipment calibration due is more & less 2 months



L C I E

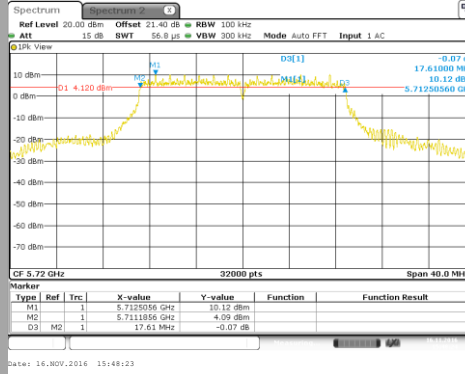
6.5. RESULTS



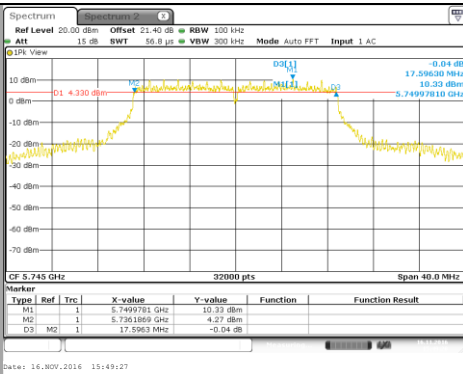


L C I E

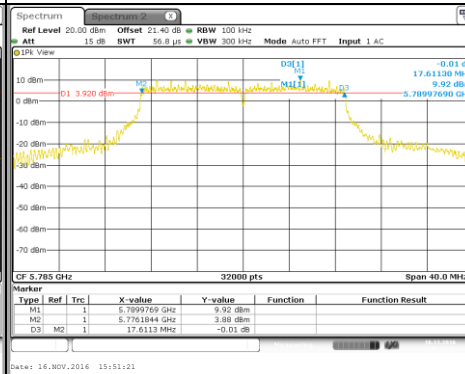
802.11n HT20/ac VHT20  
C10



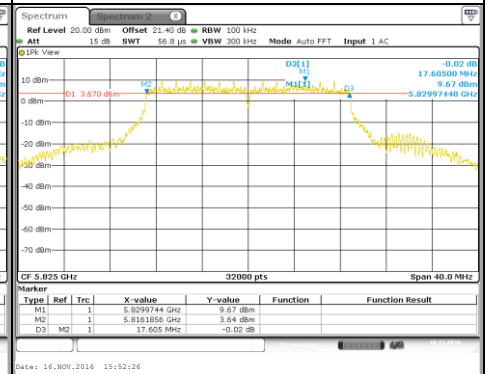
C11



C12



C13



Channel

6dB Emission Bandwidth (MHz)

C10

17,61

C11

17,6

C12

17,61

C13

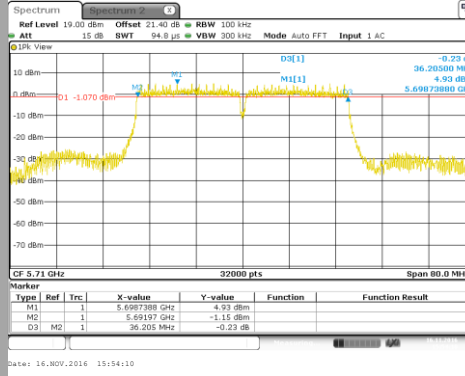
17,61



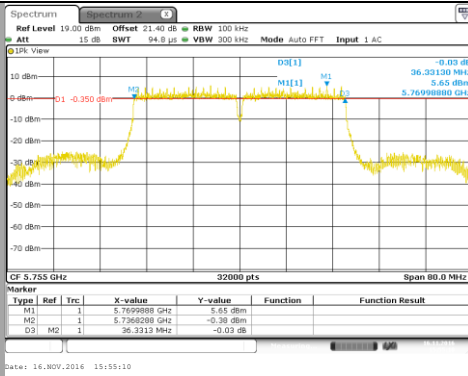
L C I E

802.11n HT40/ac VHT40

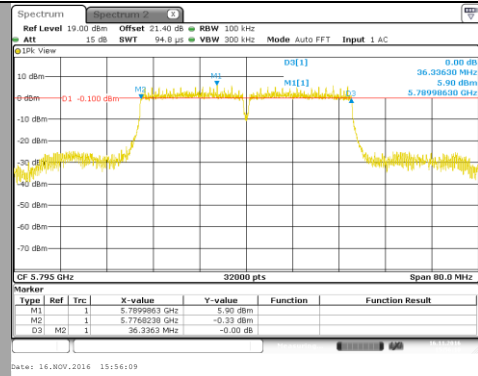
C21



C22



C23



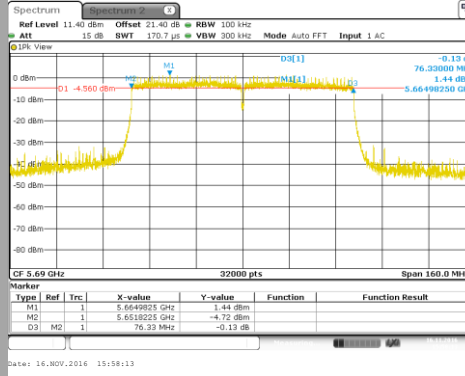
Channel	6dB Emission Bandwidth (MHz)
C21	36,21
C22	36,33
C23	36,34



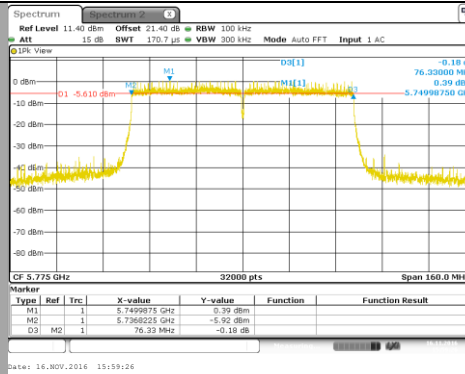


L C I E

802.11ac VHT80  
C28



C29



Channel	6dB Emission Bandwidth (MHz)
C28	76,33
C29	76,33

6.6. CONCLUSION

6dB Emission Bandwidth measurement performed on the sample of the product **SAGEMCOM TheBox (253697282)**, SN: **616400107098** in configuration and description presented in this test report, show levels **compliant** to the **47 CFR PART 15.407** limits.