



LCIE



Accréditation
N°1-0312
Scope available on
www.cofrac.fr

WIFI 5GHz (RF test) Template: Release April 14th, 2021

TEST REPORT

N°: 172319-764277-D

Version : 02

Subject

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

Issued to

Technicolor Connected Home USA, LLC
5030 Sugarloaf Parkway, Building 6
Lawrenceville – GA 30044
USA

Apparatus under test

- Product
- Trade mark
- Manufacturer
- Model under test
- Serial number
- FCC ID

IP Set-Top Box
Technicolor
Technicolor
UIW4059MIL
LAB3-V0 nr.030
G95UIW4059

Conclusion

See Test Program chapter

Test date

: April 7, 2021 to May 5, 2021

Test location

Moirans

Test Site

6500A-1 & 6500A-3

Registration Number

197516

Designation Number

FR0008

Sample receipt date

April 7, 2021

Composition of document

187 pages

Document issued on

June 9, 2021

Written by :
Armand MAHOUNGOU
Tests operator



This document shall not be reproduced, except in full, without the written approval of the LCIE. This document contains results related only to the items tested. It does not imply the conformity of the whole production to the items tested. Unless otherwise specified or rule defined by the test method, the decision of conformity doesn't take into account the uncertainty of measures. This document doesn't anticipate any certification decision. This document doesn't anticipate any certification decision. The COFRAC accreditation attests the technical capability of the testing laboratory for the only tests covered by the accreditation. If some tests mentioned in this report are carried out outside the framework of COFRAC accreditation, they are indicated by an asterisk (*).

LCIE

Laboratoire Central des Industries Electriques
Une société de Bureau Veritas

ZI Centr'alp
170 rue de Chatagnon
38430 Moirans FRANCE

Tél : +33 4 76 07 36 36
contact@lcie.fr
www.lcie.fr



PUBLICATION HISTORY

Version	Date	Author	Modification
01	May 31, 2021	Armand MAHOUNGOU	Creation of the document
02	Erreur ! Source du renvoi introuvable.	Armand MAHOUNGOU	Device internal picture removing

Each new edition of this test report replaces and cancels the previous edition. The control of the old editions of report is under responsibility of client.



SUMMARY

1.	TEST PROGRAM	4
2.	EQUIPMENT UNDER TEST: CONFIGURATION (DECLARED BY PROVIDER)	5
3.	OCCUPIED BANDWIDTH.....	21
4.	CARRIER FREQUENCIES	31
5.	26DB EMISSION BANDWIDTH	44
6.	6DB EMISSION BANDWIDTH	54
7.	DUTY CYCLE	60
8.	MAXIMUM CONDUCTED OUTPUT POWER, MAXIMUM POWER SPECTRAL DENSITY, MAXIMUM EIRP, MAXIMUM EIRP SPECTRAL DENSITY	66
9.	AC POWER LINE CONDUCTED EMISSIONS.....	103
10.	UNWANTED EMISSIONS & UNDESIRABLE EMISSION	111
11.	UNCERTAINTIES CHART	187

1. TEST PROGRAM

References

- 47 CFR Part 15.407
- KDB 789033 D02 General U-NII Tests Procedures New Rules v02r01
- 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	☒ PASS	☐ FAIL	☐ NA	☐ NP(1)
26dB Bandwidth	☒ PASS	☐ FAIL	☐ NA(2)	☐ NP(1)
6dB Bandwidth	☒ PASS	☐ FAIL	☐ NA(3)	☐ NP(1)
Duty Cycle	☒ PASS	☐ FAIL	☐ NA	☐ NP(1)
EIRP	☒ PASS	☐ FAIL	☐ NA	☐ NP(1)
Maximum Conducted Output Power	☒ PASS	☐ FAIL	☐ NA	☐ NP(1)
Power Spectral Density	☒ PASS	☐ FAIL	☐ NA	☐ NP(1)
Transmit Power Control	☐ PASS	☐ FAIL	☒ NA(4)	☐ NP(1)
AC Power Line Conducted Emission	☒ PASS	☐ FAIL	☐ NA(5)	☐ NP(1)
Unwanted Emissions & Undesirable Emission	☒ PASS	☐ FAIL	☐ NA	☐ NP(1)
Frequency Stability	☒ PASS	☐ FAIL	☐ NA	☐ 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):
Technicolor UIW4059MIL

Serial Number: LAB3-V0 nr.030



Equipment Under Test



Equipment Under Test

Power supply:

Name	Type	Rating	Reference / Sn	Comments
Supply1	☒ AC ☐ DC ☐ Battery	120-240V;50-60Hz	-	-

Inputs/outputs - Cable:

Access	Type	Length used (m)	Declared <3m	Shielded	Under test	Comments
1	Mains power supply cable	1.2	☒	☐	☐	-
2	HDMI cable	1.5	☒	☒	☐	-
3	Ethernet cable	1.5	☒	☒	☐	-

Auxiliary equipment used during test:

Type	Reference	Sn	Comments
Laptop	-	-	Use to set the EUT



Equipment information:

Type:	WIFI			
Chipset Ref :	Realtek RTL8822CS			
Frequency band:	☒ 5150MHz-5250MHz	☒ 5250MHz-5350MHz	☒ 5470MHz-5725MHz	
	☒ 5725MHz-5850MHz			
Standard:	☒ 802.11a	☒ 802.11n HT20	☒ 802.11n HT40	
	☒ 802.11ac VHT20	☒ 802.11ac VHT40	☒ 802.11ac VHT80	
	☐ 802.11ac VHT160			
Spectrum Modulation:	☒ OFDM			
Channel bandwidth:	☒ 20MHz	☒ 40MHz	☒ 80MHz	☐ 160MHz
Antenna Type:	☒ Integral	☐ External	☐ Dedicated	
Antenna connector:	☒ Yes	☐ No	☐ Temporary for test	
Antenna Requirements §15.203	The transmitter uses an integral antenna with a u.fl connector which is classified as a unique connector			
Transmit chains:	☐ 1	☒ 2	☐ 3	☐ 4
	☐ 5	☐ 6	☐ 7	☐ 8
TPC:	☐ Yes		☐ No	
Receiver chains	☐ 1	☒ 2	☐ 3	☐ 4
	☐ 5	☐ 6	☐ 7	☐ 8
Type of equipment:	☒ Stand-alone	☐ Plug-in	☐ Combined	
Equipment arrangement:	☒ Tabletop	☐ Floor-standing	☐ Multiple orientations	
Operating temperature range:	Tmin:	☐ -20°C	☐ 0°C	☒ 5 °C
	Tnom:	20°C		
	Tmax:	☐ 35°C	☐ 55°C	☒ 45 °C
Type of power source:	☒ AC power supply	☒ DC power supply	☐ Battery Battery Type	
Operating voltage range:	Vmin:	☒ 90 V/60Hz	☒ 11,4 VDC	
	Vnom:	☒ 120V/60Hz	☒ 12 VDC	
	Vmax:	☒ 253 V/60Hz	☒ 12,6 VDC	
Mode:	☐ Master	☐ Slave with radar detection	☒ Slave without radar detection	
	☐ Bridge		☐ Mesh	
Fixed outdoor P to P/M application:	☐ Yes		☒ No	
System architectures:	☒ IP based		☐ Frame based	
User access restriction:	☒ Yes (The manufacturer declares that information regarding the parameters of the detected Radar Waveforms is not available to the end user)		☐ No	



Antenna Characteristic			
Antenna assembly	Gain (dBi)	Frequency Band (MHz)	Impedance(Ω)
1	5.1	5150MHz-5850MHz	50
2	4.7	5150MHz-5850MHz	50
Accumulated	3	5150MHz-5850MHz	50

Accumulated gain calculation		
Formula used for calculation	KDB	Correlated
$10 \log[(10G1 / 20 + 10G2 / 20 + \dots + 10GN / 20)^2 / NANT] \text{dBi}$	KDB 662911 D01 v02r01	☐ Yes / ☒ No

Hardware information		
Software (if applicable):	V. :	UIW4059MIL_HSW 0.7

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

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

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

No DFS Channel
DFS Channel
Weather DFS Channel (Not Authorised for RSS-247)

DATA RATE		
802.11a		
Data Rate (Mbps)	Modulation Type	Modulation Worst Case
6	BPSK	☒
9	BPSK	☐
12	QPSK	☐
18	QPSK	☐
24	16-QAM	☐
36	16-QAM	☐
48	64-QAM	☐
54	64-QAM	☐



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)	
☑	0	1	BPSK				6.5	7.2	☐
	1	1	QPSK				13	14.4	☐
	2	1	QPSK				19.5	21.7	☐
	3	1	16-QAM				26	28.9	☐
	4	1	16-QAM				39	43.3	☐
	5	1	64-QAM				52	57.8	☐
	6	1	64-QAM				58.5	65	☐
☑	7	1	64-QAM				65	72.2	☐
	8	2	BPSK				13	14.4	☑
	9	2	QPSK				26	28.9	☐
	10	2	QPSK				39	43.3	☐
	11	2	16-QAM				52	57.8	☐
	12	2	16-QAM				78	86.7	☐
	13	2	64-QAM				104	115.6	☐
☐	14	2	64-QAM				117	130.3	☐
	15	2	64-QAM				130	144.4	☐
	16	3	BPSK				19.5	21.7	☐
	17	3	QPSK				39	43.3	☐
	18	3	QPSK				58.5	65	☐
	19	3	16-QAM				78	86.7	☐
	20	3	16-QAM				117	130	☐
☐	21	3	64-QAM				156	173.3	☐
	22	3	64-QAM				175.5	195	☐
	23	3	64-QAM				195	216.7	☐
	24	4	BPSK				26	28.9	☐
	25	4	QPSK				52	57.8	☐
	26	4	QPSK				78	86.7	☐
	27	4	16-QAM				104	115.6	☐
☐	28	4	16-QAM				156	173.3	☐
	29	4	64-QAM				208	231.1	☐
	30	4	64-QAM				234	260	☐
	31	4	64-QAM				260	288.9	☐
☐	32	1	BPSK	-	-	-	-	-	☐
	33	2	16-QAM	QPSK	-	-	39	43.3	☐
	34	2	64-QAM	QPSK	-	-	52	57.8	☐
	35	2	64-QAM	16-QAM	-	-	65	72.2	☐
	36	2	16-QAM	QPSK	-	-	58.5	65	☐
	37	2	64-QAM	QPSK	-	-	78	86.7	☐
	38	2	64-QAM	16-QAM	-	-	97.5	108.3	☐
☐	39	3	16-QAM	QPSK	QPSK	-	52	57.8	☐
	40	3	16-QAM	16-QAM	QPSK	-	65	72.2	☐
	41	3	64-QAM	QPSK	QPSK	-	65	72.2	☐
	42	3	64-QAM	16-QAM	QPSK	-	78	86.7	☐
	43	3	64-QAM	16-QAM	16-QAM	-	91	101.1	☐
	44	3	64-QAM	64-QAM	QPSK	-	91	101.1	☐
	45	3	64-QAM	64-QAM	16-QAM	-	104	115.6	☐
☐	46	3	16-QAM	QPSK	QPSK	-	78	86.7	☐
	47	3	16-QAM	16-QAM	QPSK	-	97.5	108.3	☐
	48	3	64-QAM	QPSK	QPSK	-	97.5	108.3	☐
	49	3	64-QAM	16-QAM	QPSK	-	117	130	☐
	50	3	64-QAM	16-QAM	16-QAM	-	136.5	151.7	☐
	51	3	64-QAM	64-QAM	QPSK	-	136.5	151.7	☐
	52	3	64-QAM	64-QAM	16-QAM	-	156	173.3	☐
☐	53	4	16-QAM	QPSK	QPSK	QPSK	65	72.2	☐
	54	4	16-QAM	16-QAM	QPSK	QPSK	78	86.7	☐
	55	4	16-QAM	16-QAM	16-QAM	QPSK	91	101.1	☐
	56	4	64-QAM	QPSK	QPSK	QPSK	78	86.7	☐
	57	4	64-QAM	16-QAM	QPSK	QPSK	91	101.1	☐
	58	4	64-QAM	16-QAM	16-QAM	QPSK	104	115.6	☐
	59	4	64-QAM	16-QAM	16-QAM	16-QAM	117	130	☐
☐	60	4	64-QAM	QPSK	QPSK	QPSK	104	115.6	☐
	61	4	64-QAM	16-QAM	16-QAM	QPSK	117	130	☐
	62	4	64-QAM	16-QAM	16-QAM	16-QAM	130	144.4	☐
	63	4	64-QAM	64-QAM	64-QAM	QPSK	130	144.4	☐
	64	4	64-QAM	64-QAM	64-QAM	16-QAM	143	158.9	☐
	65	4	16-QAM	QPSK	QPSK	QPSK	97.5	108.3	☐
	66	4	16-QAM	16-QAM	QPSK	QPSK	117	130	☐
☐	67	4	16-QAM	16-QAM	16-QAM	QPSK	136.5	151.7	☐
	68	4	64-QAM	QPSK	QPSK	QPSK	117	130	☐
	69	4	64-QAM	16-QAM	QPSK	QPSK	136.5	151.7	☐
	70	4	64-QAM	16-QAM	16-QAM	QPSK	156	173.3	☐
	71	4	64-QAM	16-QAM	16-QAM	16-QAM	175.5	195	☐
	72	4	64-QAM	64-QAM	QPSK	QPSK	156	173.3	☐
	73	4	64-QAM	64-QAM	16-QAM	QPSK	175.5	195	☐
☐	74	4	64-QAM	64-QAM	16-QAM	16-QAM	195	216.7	☐
	75	4	64-QAM	64-QAM	64-QAM	QPSK	195	216.7	☐
	76	4	64-QAM	64-QAM	64-QAM	16-QAM	214.5	238.3	☐



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)	
☑	0	1	BPSK				13	15	☐
	1	1	QPSK				27	30	☐
	2	1	QPSK				40.5	45	☐
	3	1	16-QAM				54	60	☐
	4	1	16-QAM				81	90	☐
	5	1	64-QAM				108	120	☐
	6	1	64-QAM				121.5	135	☐
☑	7	1	64-QAM				135	150	☐
	8	2	BPSK				27	30	☑
	9	2	QPSK				54	60	☐
	10	2	QPSK				81	90	☐
	11	2	16-QAM				108	120	☐
	12	2	16-QAM				162	180	☐
	13	2	64-QAM				216	240	☐
☐	14	2	64-QAM				243	270	☐
	15	2	64-QAM				270	300	☐
	16	3	BPSK				40.5	45	☐
	17	3	QPSK				81	90	☐
	18	3	QPSK				121.5	135	☐
	19	3	16-QAM				162	180	☐
	20	3	16-QAM				243	270	☐
☐	21	3	64-QAM				324	360	☐
	22	3	64-QAM				364.5	405	☐
	23	3	64-QAM				405	450	☐
	24	4	BPSK				54	60	☐
	25	4	QPSK				108	120	☐
	26	4	QPSK				162	180	☐
	27	4	16-QAM				216	240	☐
☐	28	4	16-QAM				324	360	☐
	29	4	64-QAM				432	480	☐
	30	4	64-QAM				486	540	☐
	31	4	64-QAM				540	600	☐
	32	1	BPSK	-	-	-	6.0	6.7	☐
	33	2	16-QAM	QPSK	-	-	81	90.0	☐
	34	2	64-QAM	QPSK	-	-	108	120	☐
☐	35	2	64-QAM	16-QAM	-	-	135	150	☐
	36	2	16-QAM	QPSK	-	-	121.5	135	☐
	37	2	64-QAM	QPSK	-	-	162	180	☐
	38	2	64-QAM	16-QAM	-	-	202.5	225	☐
	39	3	16-QAM	QPSK	QPSK	-	108	120	☐
	40	3	16-QAM	16-QAM	QPSK	-	135	150	☐
	41	3	64-QAM	QPSK	QPSK	-	135	150	☐
☐	42	3	64-QAM	16-QAM	QPSK	-	162	180	☐
	43	3	64-QAM	16-QAM	16-QAM	-	189	210	☐
	44	3	64-QAM	64-QAM	QPSK	-	189	210	☐
	45	3	64-QAM	64-QAM	16-QAM	-	216	240	☐
	46	3	16-QAM	QPSK	QPSK	-	162	180	☐
	47	3	16-QAM	16-QAM	QPSK	-	202.5	225	☐
	48	3	64-QAM	QPSK	QPSK	-	202.5	225	☐
☐	49	3	64-QAM	16-QAM	QPSK	-	243	270	☐
	50	3	64-QAM	16-QAM	16-QAM	-	283.5	315	☐
	51	3	64-QAM	64-QAM	QPSK	-	283.5	315	☐
	52	3	64-QAM	64-QAM	16-QAM	-	324	360	☐
	53	4	16-QAM	QPSK	QPSK	QPSK	135	150	☐
	54	4	16-QAM	16-QAM	QPSK	QPSK	162	180	☐
	55	4	16-QAM	16-QAM	16-QAM	QPSK	189	210	☐
☐	56	4	64-QAM	QPSK	QPSK	QPSK	162	180	☐
	57	4	64-QAM	16-QAM	QPSK	QPSK	189	210	☐
	58	4	64-QAM	16-QAM	16-QAM	QPSK	216	240	☐
	59	4	64-QAM	16-QAM	16-QAM	16-QAM	243	270	☐
	60	4	64-QAM	QPSK	QPSK	QPSK	216	240	☐
	61	4	64-QAM	16-QAM	16-QAM	QPSK	243	270	☐
	62	4	64-QAM	16-QAM	16-QAM	16-QAM	270	300	☐
☐	63	4	64-QAM	64-QAM	64-QAM	QPSK	270	300	☐
	64	4	64-QAM	64-QAM	64-QAM	16-QAM	297	330	☐
	65	4	16-QAM	QPSK	QPSK	QPSK	202.5	225	☐
	66	4	16-QAM	16-QAM	QPSK	QPSK	243	270	☐
	67	4	16-QAM	16-QAM	16-QAM	QPSK	283.5	315	☐
	68	4	64-QAM	QPSK	QPSK	QPSK	243	270	☐
	69	4	64-QAM	16-QAM	QPSK	QPSK	283.5	315	☐
☐	70	4	64-QAM	16-QAM	16-QAM	QPSK	324	360	☐
	71	4	64-QAM	16-QAM	16-QAM	16-QAM	364.5	405	☐
	72	4	64-QAM	64-QAM	QPSK	QPSK	324	360	☐
	73	4	64-QAM	64-QAM	16-QAM	QPSK	364.5	405	☐
	74	4	64-QAM	64-QAM	16-QAM	16-QAM	405	450	☐
	75	4	64-QAM	64-QAM	64-QAM	QPSK	405	450	☐
	76	4	64-QAM	64-QAM	64-QAM	16-QAM	445.5	495	☐



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
☑	0	1	BPSK	1/2	6,5	7,2	☐
	1	1	QPSK	1/2	13	14,4	☐
	2	1	QPSK	3/4	19,5	21,7	☐
	3	1	16-QAM	1/2	26	28,9	☐
	4	1	16-QAM	3/4	39	43,3	☐
	5	1	64-QAM	2/3	52	57,8	☐
	6	1	64-QAM	3/4	58,5	65	☐
	7	1	64-QAM	5/6	65	72,2	☐
	8	1	256-QAM	3/4	78	86,7	☐
☑	9	1	256-QAM	5/6	N/A	N/A	☐
	10	2	BPSK	1/2	13	14,4	☒
	11	2	QPSK	1/2	26	28,8	☐
	12	2	QPSK	3/4	39	43,4	☐
	13	2	16-QAM	1/2	52	57,8	☐
	14	2	16-QAM	3/4	78	86,6	☐
	15	2	64-QAM	2/3	104	115,6	☐
	16	2	64-QAM	3/4	117	130	☐
	17	2	64-QAM	5/6	130	144,4	☐
☐	18	2	256-QAM	3/4	156	173,4	☐
	19	2	256-QAM	5/6	N/A	N/A	☐
	20	3	BPSK	1/2	19,5	21,6	☐
	21	3	QPSK	1/2	39	43,2	☐
	22	3	QPSK	3/4	58,5	65,1	☐
	23	3	16-QAM	1/2	78	86,7	☐
	24	3	16-QAM	3/4	117	129,9	☐
	25	3	64-QAM	2/3	156	173,4	☐
	26	3	64-QAM	3/4	175,5	195	☐
☐	27	3	64-QAM	5/6	195	216,6	☐
	28	3	256-QAM	3/4	234	260,1	☐
	29	3	256-QAM	5/6	N/A	N/A	☐
	30	4	BPSK	1/2	26	28,8	☐
	31	4	QPSK	1/2	52	57,6	☐
	32	4	QPSK	3/4	78	86,8	☐
	33	4	16-QAM	1/2	104	115,6	☐
	34	4	16-QAM	3/4	156	173,2	☐
	35	4	64-QAM	2/3	208	231,2	☐
☐	36	4	64-QAM	3/4	234	260	☐
	37	4	64-QAM	5/6	260	288,8	☐
	38	4	256-QAM	3/4	312	346,8	☐
	39	4	256-QAM	5/6	N/A	N/A	☐
	40	5	BPSK	1/2	32,5	36	☐
	41	5	QPSK	1/2	65	72	☐
	42	5	QPSK	3/4	97,5	108,5	☐
	43	5	16-QAM	1/2	130	144,5	☐
	44	5	16-QAM	3/4	195	216,5	☐
☐	45	5	64-QAM	2/3	260	289	☐
	46	5	64-QAM	3/4	292,5	325	☐
	47	5	64-QAM	5/6	325	361	☐
	48	5	256-QAM	3/4	390	433,5	☐
	49	5	256-QAM	5/6	N/A	N/A	☐
	50	6	BPSK	1/2	39	43,2	☐
	51	6	QPSK	1/2	78	86,4	☐
	52	6	QPSK	3/4	117	130,2	☐
	53	6	16-QAM	1/2	156	173,4	☐
☐	54	6	16-QAM	3/4	234	259,8	☐
	55	6	64-QAM	2/3	312	346,8	☐
	56	6	64-QAM	3/4	351	390	☐
	57	6	64-QAM	5/6	390	433,2	☐
	58	6	256-QAM	3/4	468	520,2	☐
	59	6	256-QAM	5/6	N/A	N/A	☐
	60	7	BPSK	1/2	45,5	50,4	☐
	61	7	QPSK	1/2	91	100,8	☐
	62	7	QPSK	3/4	136,5	151,9	☐
☐	63	7	16-QAM	1/2	182	202,3	☐
	64	7	16-QAM	3/4	273	303,1	☐
	65	7	64-QAM	2/3	364	404,6	☐
	66	7	64-QAM	3/4	409,5	455	☐
	67	7	64-QAM	5/6	455	505,4	☐
	68	7	256-QAM	3/4	546	606,9	☐
	69	7	256-QAM	5/6	N/A	N/A	☐
	70	8	BPSK	1/2	52	57,6	☐
	71	8	QPSK	1/2	104	115,2	☐
☐	72	8	QPSK	3/4	156	173,6	☐
	73	8	16-QAM	1/2	208	231,2	☐
	74	8	16-QAM	3/4	312	346,4	☐
	75	8	64-QAM	2/3	416	462,4	☐
	76	8	64-QAM	3/4	468	520	☐
	77	8	64-QAM	5/6	520	577,6	☐
	78	8	256-QAM	3/4	624	693,6	☐
	79	8	256-QAM	5/6	N/A	N/A	☐



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



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

2.2. RUNNING MODE

Test mode	Description of test mode
Test mode 1	Permanent emission with modulation on a fixed channel in the data rate that produced the highest power

Test	Running mode	
Occupied Bandwidth	☒ Test mode 1 (1)	☐ Alternative test mode()
26dB Bandwidth	☒ Test mode 1 (1)	☐ Alternative test mode()
6dB Bandwidth	☒ Test mode 1 (1)	☐ Alternative test mode()
Duty Cycle	☒ Test mode 1 (1)	☐ Alternative test mode()
EIRP	☒ Test mode 1 (1)	☐ Alternative test mode()
Maximum Conducted Output Power	☒ Test mode 1 (1)	☐ Alternative test mode()
Power Spectral Density	☒ Test mode 1 (1)	☐ Alternative test mode()
AC Power Line Conducted Emission	☒ Test mode 1 (1)	☐ Alternative test mode()
Unwanted Emissions & Undesirable Emission	☒ Test mode 1 (1)	☐ Alternative test mode()
Frequency Stability	☒ Test mode 1 (1)	☐ Alternative test mode()

- (1) Following commands with the specific test software “teraterm” are used to set the product:
- See document “LCIE_Radio tests_UZW4059MIL_v0.4.docx” and “MIL_Script for radio certification_v0.3.xlsx” (provided by customer) for the command used during test.

Power Target used during test :

Mode A		
Modulation 6M / 20M		
Channel	Tx1 target	Tx2 target
C1	81	84
C2	81	84
C3	81	84
C4	81	84
C5	81	84
C6	81	84
C7	81	84
C8	81	84
C9	81	84
C10	81	84
C11	81	84
C12	81	84
C13	81	84

Mode nHT20		
Modulation HTMCS8 / 20M		
Channel	Tx1 target	Tx2 target
C1	81	84
C2	81	84
C3	81	84
C4	81	84
C5	81	84
C6	81	84
C7	81	84
C8	81	84
C9	81	84
C10	81	84
C11	81	84
C12	81	84
C13	81	84

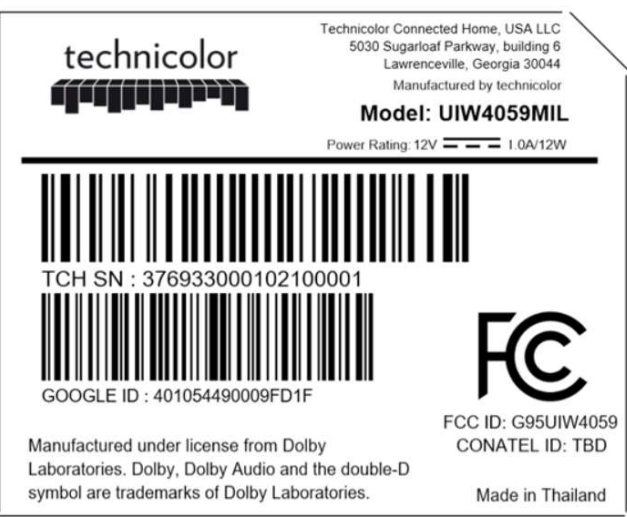
Mode nHT40		
Modulation HTMCS8 / 40M		
Channel	Tx1 target	Tx2 target
C14	75	78
C15	81	84
C16	81	84
C17	77	80
C18	75	78
C19	81	84
C20	81	84
C21	77	80
C22	77	80
C23	81	84

Mode VHT80		
Modulation VHT1MCS0 / 80M		
Channel	Tx1 target	Tx2 target
C24	73	76
C25	73	76
C26	73	76
C27	81	84
C28	77	80
C29	77	80

2.3. EQUIPMENT LABELLING



AC ADAPTER
WIRE POWER ADAPTADOR DE CA
 technicolor P/N: 6267443A (SK01160)
 MODEL / MODELO: E012-10120100VU
 INPUT / ENTRADA: 100-240V~, 50/60Hz, 0.4A
 OUTPUT / SALIDA: 12.0V 1.0A LPS
 EFICIENCIA ENERGÉTICA VI
 Cumple con la NOM-029-ENER-2017
 UL US E335801
 LISTED Power Supply
 NOM NYCE
 MADE IN CHINA / HECHO EN CHINA



technicolor
 Technicolor Connected Home, USA LLC
 5030 Sugarloaf Parkway, building 6
 Lawrenceville, Georgia 30044
 Manufactured by technicolor
Model: UIW4059MIL
 Power Rating: 12V 1.0A/12W
 TCH SN : 376933000102100001
 GOOGLE ID : 401054490009FD1F
 FCC ID: G95UIW4059
 CONATEL ID: TBD
 Manufactured under license from Dolby Laboratories. Dolby, Dolby Audio and the double-D symbol are trademarks of Dolby Laboratories.
 Made in Thailand

2.4. EQUIPMENT MODIFICATION

☒ None
 ☐ Modification:



2.5. FIELD STRENGTH CALCULATION

The field strength is calculated by adding the Antenna Factor and Cable Factor, and subtracting the Amplifier Gain (if any) from the measured reading. The basic equation with a sample calculation is as follow:

$$FS = RA + AF + CF - AG$$

Where
FS = Field Strength
RA = Receiver Amplitude
AF = Antenna Factor
CF = Cable Factor
AG = Amplifier Gain

Assume a receiver reading of 52.5dB μ V is obtained. The antenna factor of 7.4 and a cable factor of 1.1 are added. The amplifier gain of 29dB is subtracted, giving a field strength of 32 dB μ V/m.

$$FS = 52.5 + 7.4 + 1.1 - 29 = 32 \text{ dB}\mu\text{V/m}$$

The 32 dB μ V/m value can be mathematically converted to its corresponding level in μ V/m.

$$\text{Level in } \mu\text{V/m} = \text{Common Antilogarithm } [(32\text{dB}\mu\text{V/m})/20] = 39.8 \mu\text{V/m}.$$

2.6. CALIBRATION DATE

The calibration intervals are extended at 12+2 months. This extended interval is based on the fact that there is sufficient calibration data to statistically establish a trend or based on experience of use of the test equipment to assure good measurement results for a longer period.

3. OCCUPIED BANDWIDTH

3.1. TEST CONDITIONS

Test performed by : Armand MAHOUNGOU
Date of test : April 21, 2021
Ambient temperature : 26°C
Relative humidity : 47%

3.2. TEST SETUP

- The Equipment Under Test is installed:

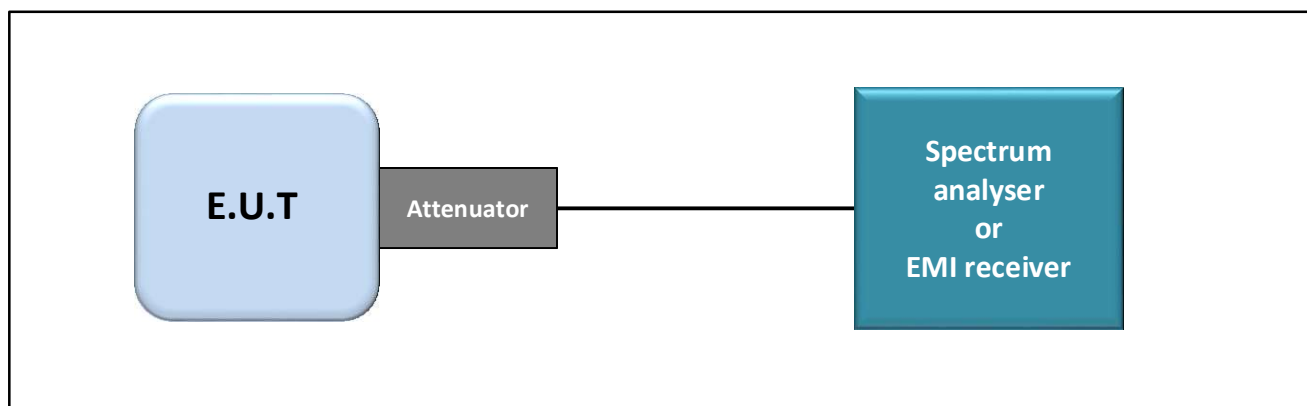
- ☒ On a table
- ☐ In an anechoic chamber

- Measurement is performed with a spectrum analyzer in:

- ☒ Conducted Method
- ☐ Radiated Method

- Test Procedure:

- ☒ KDB 789033 D02 General UNII Test Procedures New Rules v02r01 § D



Test set up of Occupied Bandwidth



Photograph for Occupied bandwidth

3.3. LIMIT

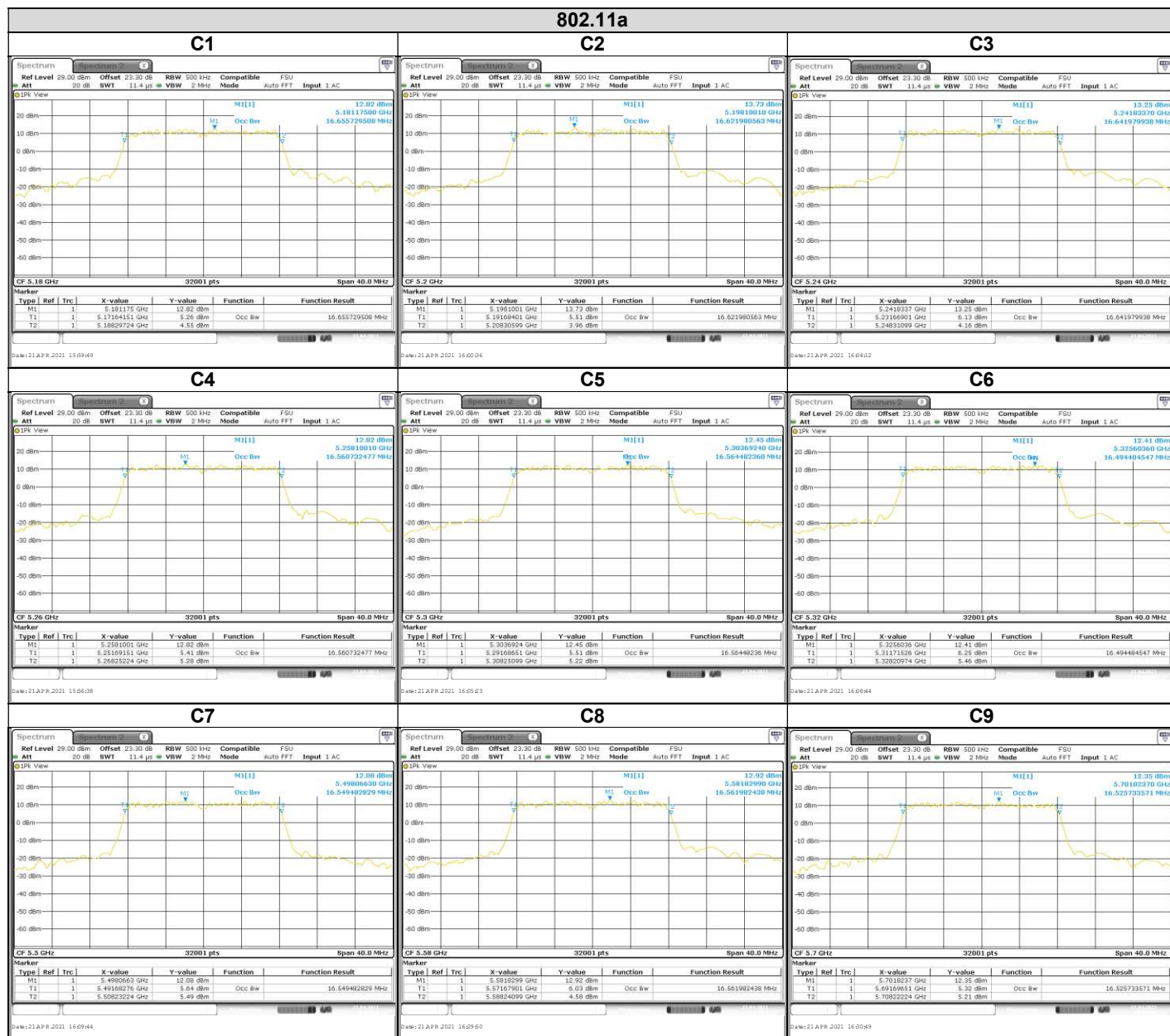
None

3.4. TEST EQUIPMENT LIST

DESCRIPTION	MANUFACTURER	MODEL	N° LCIE	Cal_Date	Cal_Due
EMI receiver	ROHDE & SCHWARZ	ESR7	A2642026	2019/07	2021/07
Cable + Attenuateur 20dB	PASTERNAK	PE350-150CM	A5329973	2020/09	2021/09
Multimeter	KEITHLEY	2000	A1242090	2019/05	2021/05
Power supply	KIKUSUI	PCR500M	A7040079	See Multimeter	See Multimeter
Load 50 ohms	TELEGARTNER	-	A7150103	2019/04	2021/04
Load 50 ohms	TELEGARTNER	-	A7150104	2019/04	2021/04

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

3.5. RESULTS



802.11a

C10



Date: 21 APR 2021 16:37:57

C11



Date: 21 APR 2021 16:08:13

C12



Date: 21 APR 2021 16:44:41

C13



Date: 21 APR 2021 16:45:04

Channel

Occupied Channel Bandwidth (MHz)

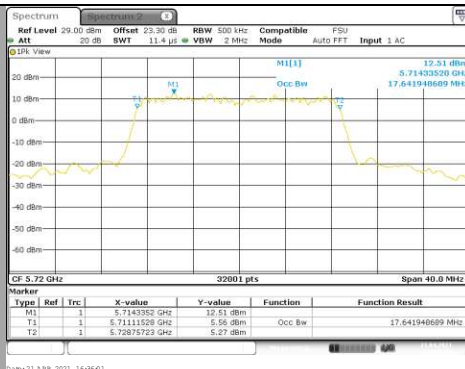
C1	16.656
C2	16.622
C3	16.642
C4	16.561
C5	16.564
C6	16.494
C7	16.549
C8	16.562
C9	16.526
C10	16.545
C11	16.577
C12	16.571
C13	16.562

802.11n HT20/ac VHT20



802.11n HT20/ac VHT20

C10



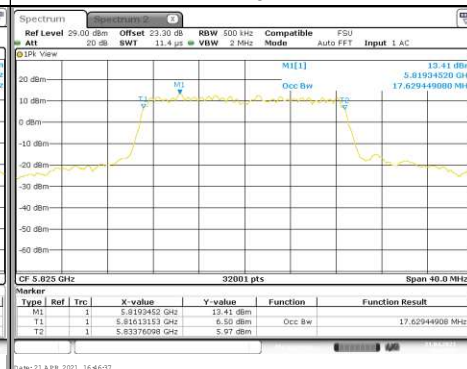
C11



C12



C13



Channel

Occupied Channel Bandwidth (MHz)

C1

17.692

C2

17.724

C3

17.724

C4

17.697

C5

17.656

C6

17.652

C7

17.634

C8

17.619

C9

17.647

C10

17.642

C11

17.673

C12

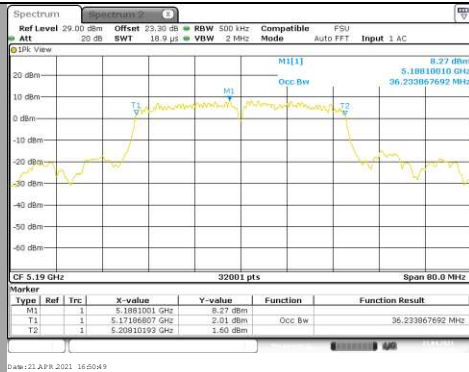
17.653

C13

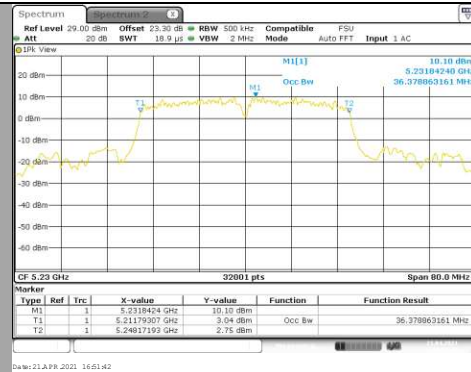
17.629

802.11n HT40/ac VHT40

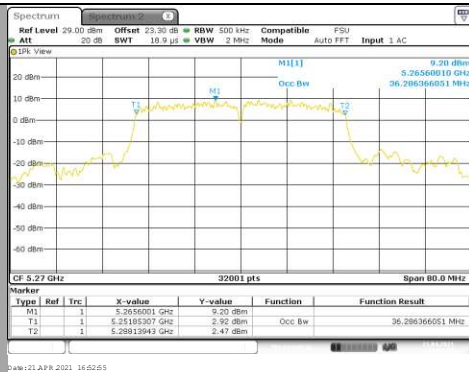
C14



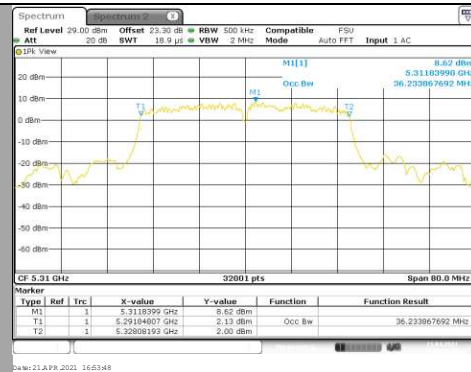
C15



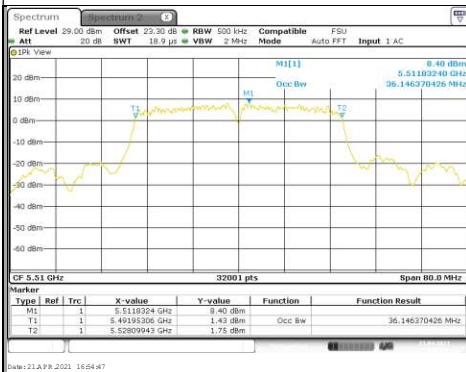
C16



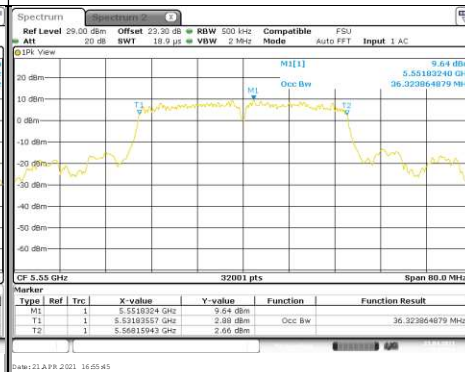
C17



C18



C19



C20

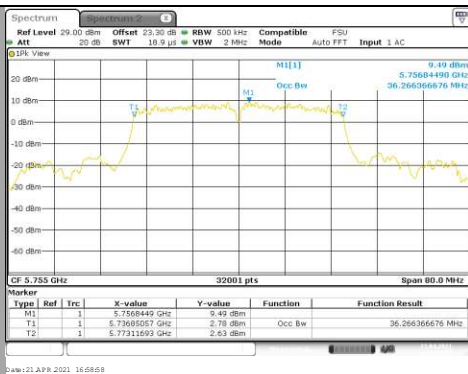


802.11n HT40/ac VHT40

C21



C22



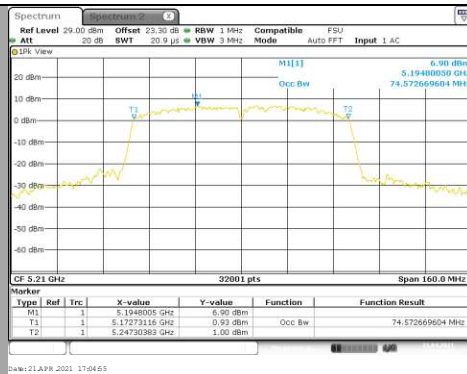
C23



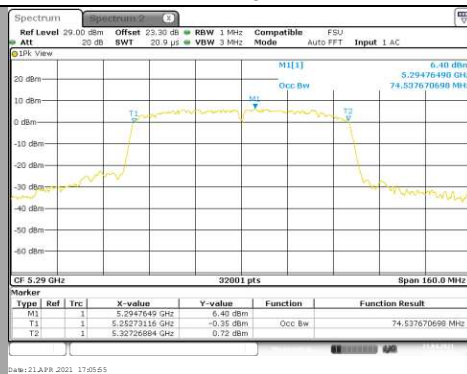
Channel	Occupied Channel Bandwidth (MHz)
C14	36.234
C15	36.379
C16	36.286
C17	36.234
C18	36.146
C19	36.324
C20	36.296
C21	36.201
C22	36.266
C23	36.324

802.11ac VHT80

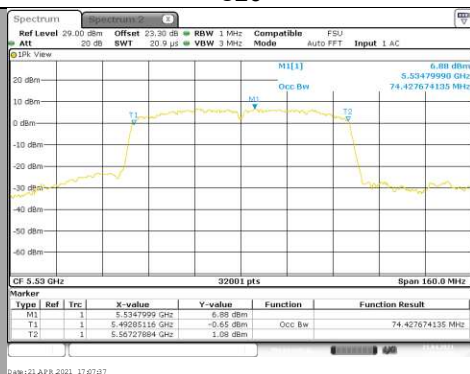
C24



C25



C26

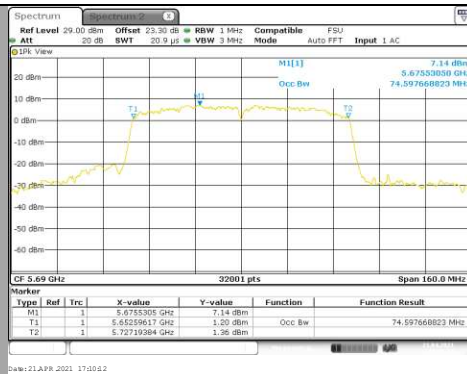


C27

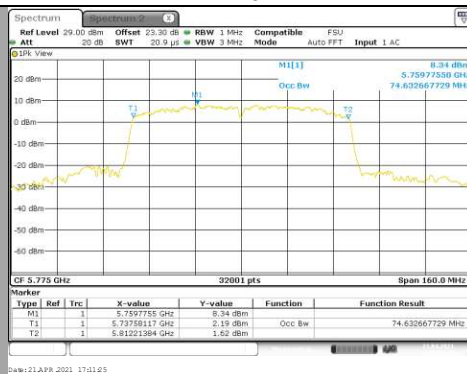


802.11ac VHT80

C28



C29



Channel	Occupied Channel Bandwidth (MHz)
C24	74.573
C25	74.538
C26	74.428
C27	74.633
C28	74.598
C29	74.633

3.6. CONCLUSION

Occupied Channel Bandwidth measurement performed on the sample of the product **Technicolor UIW4059MIL**, SN: **LAB3-V0 nr.030**, 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 : Julien Palard
Date of test : April 28, 2021
Ambient temperature : 23 °C
Relative humidity : 39 %

4.2. TEST SETUP

- The Equipment under Test is installed:

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

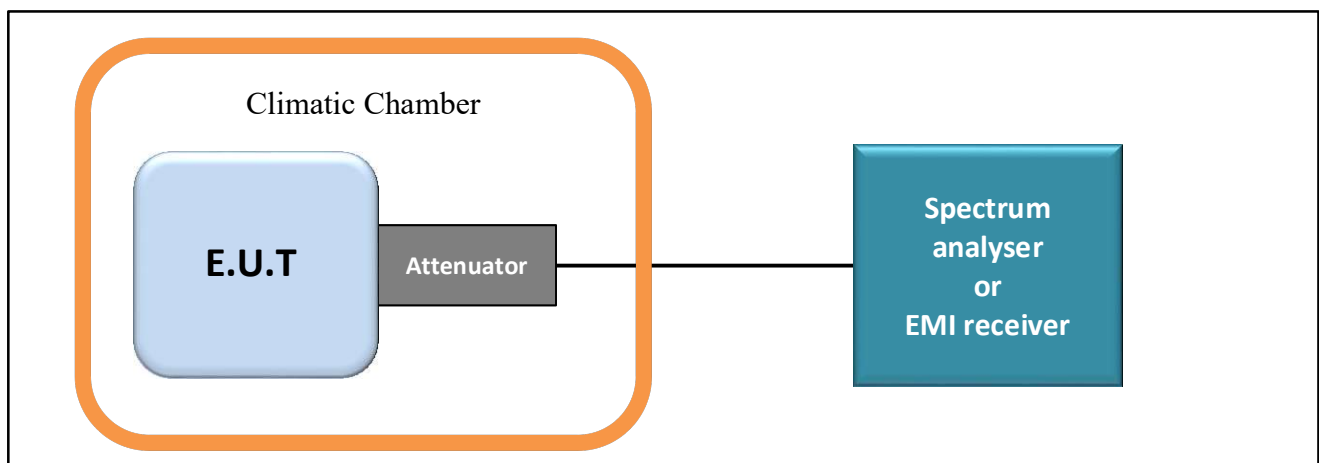
-Measurement is performed with a spectrum analyzer

- ☒ On the EUT conducted access
- ☐ With a test fixture

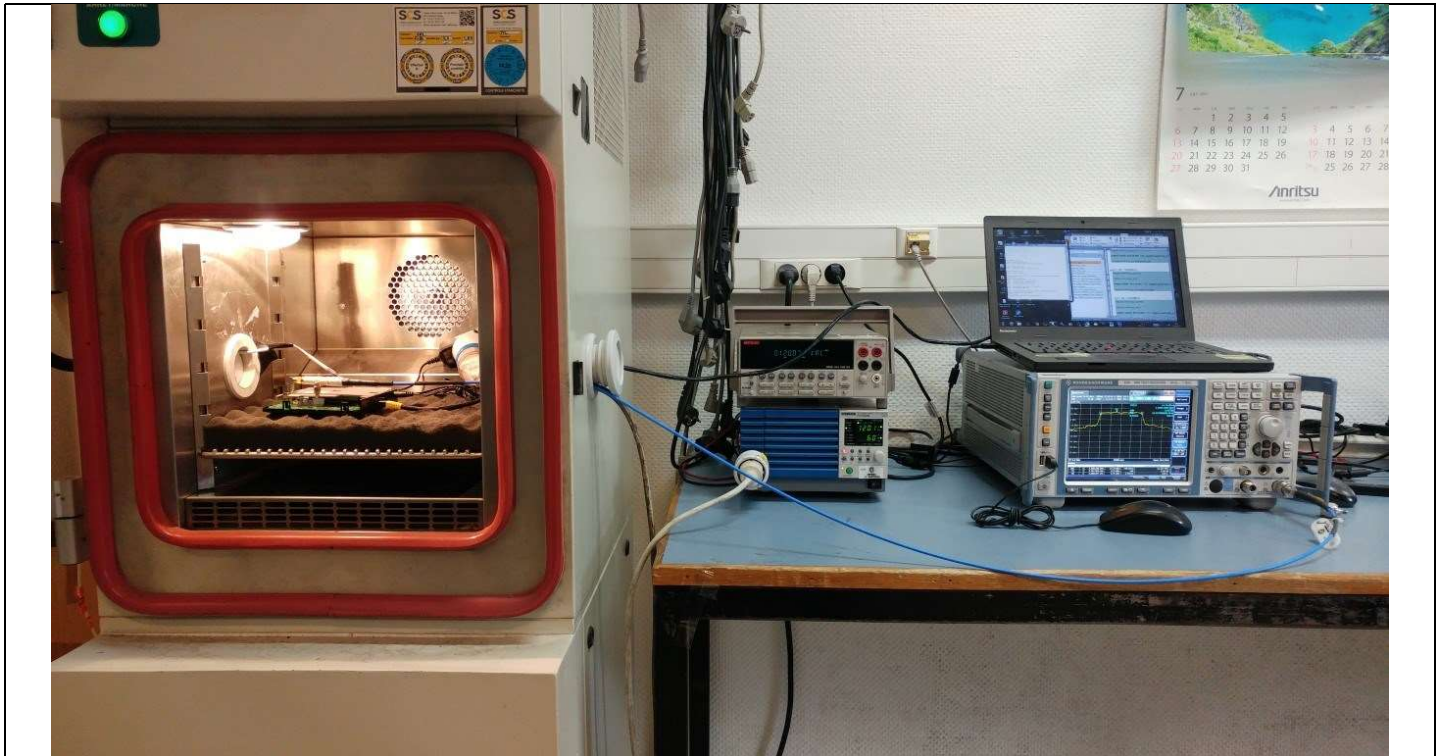
-Method of measurement

- ☐ 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.



Test set up of Carrier Frequencies



Photograph for Carrier Frequencies in normal test conditions



Photograph for Carrier Frequencies in extreme test conditions



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
Climatic chamber	SECASI Technologies	SLT-34	D1024029	Calibrate with thermometer	Calibrate with thermometer
Thermometer	AOIP	TM 6630	B4041042	2020/04	2021/04
EMI receiver	ROHDE & SCHWARZ	ESR7	A2642026	2019/07	2021/07
Cable + Attenuateur 20dB	PASTERNAK	PE350-150CM	A5329973	2020/09	2021/09
Multimeter	KEITHLEY	2000	A1242090	2019/05	2021/05
Power supply	KIKUSUI	PCR500M	A7040079	See Multimeter	See Multimeter
Load 50 ohms	TELEGARTNER	-	A7150103	2019/04	2021/04
Load 50 ohms	TELEGARTNER	-	A7150104	2019/04	2021/04

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:

4.6. RESULTS



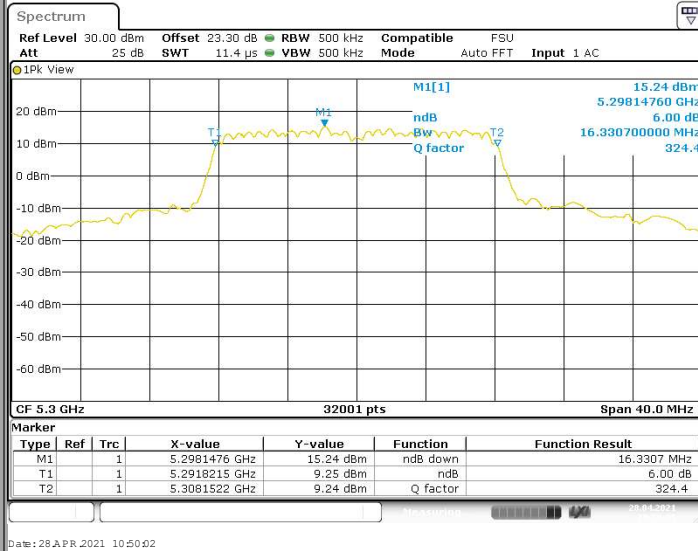
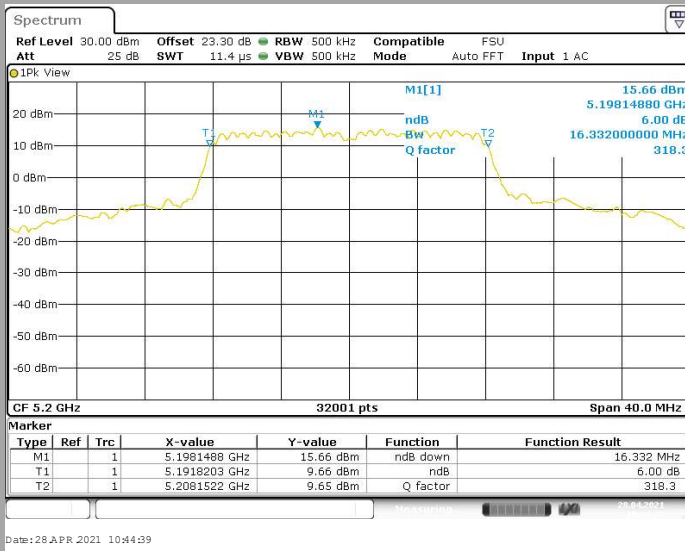
802.11a/802.11nHT20/ac VHT20

Tmin

Vnom

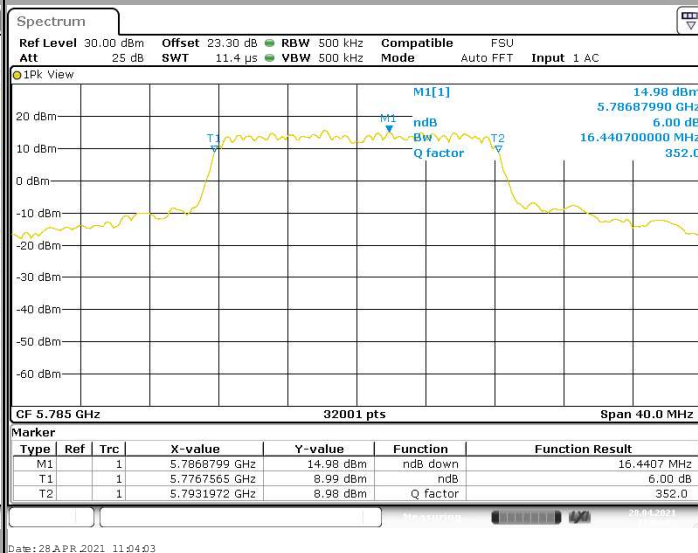
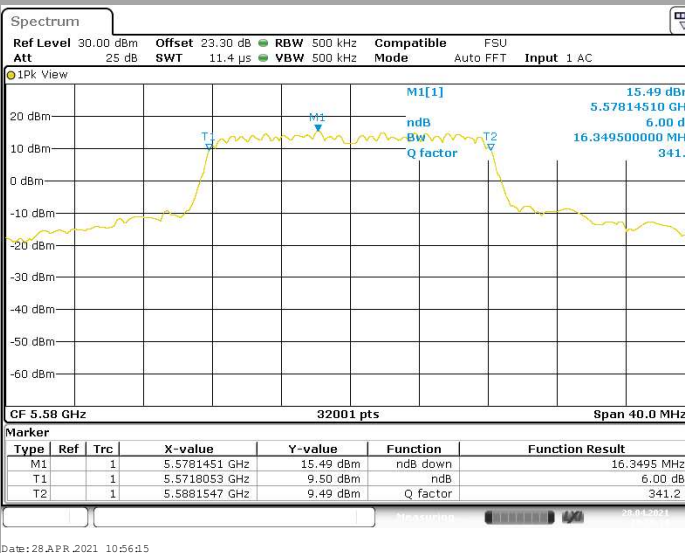
C2

C5



C8

C12





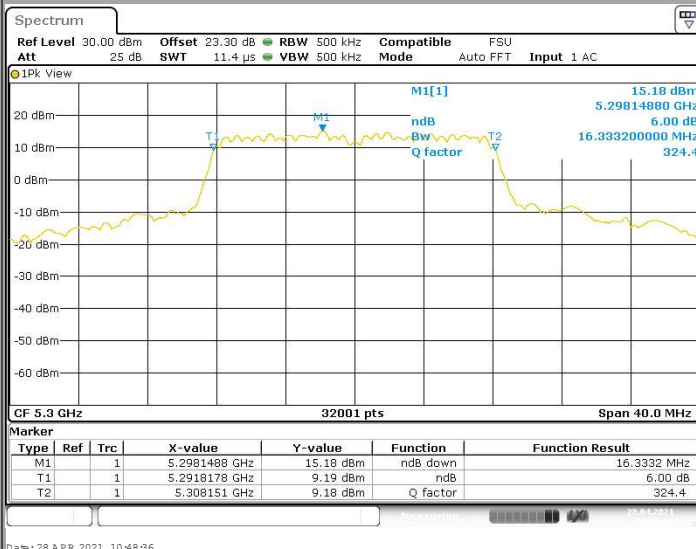
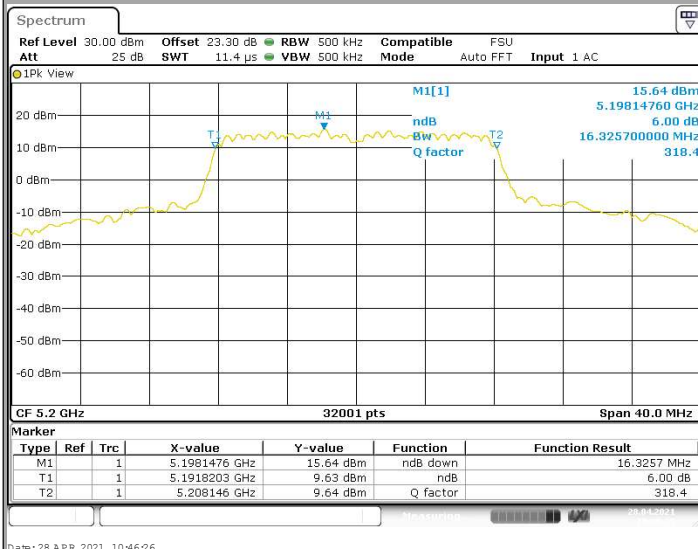
802.11a/802.11nHT20/ac VHT20

Tmin

Vmax

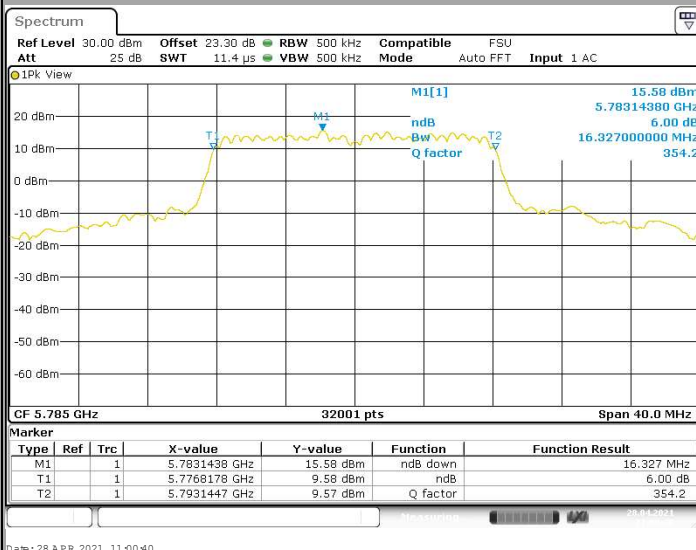
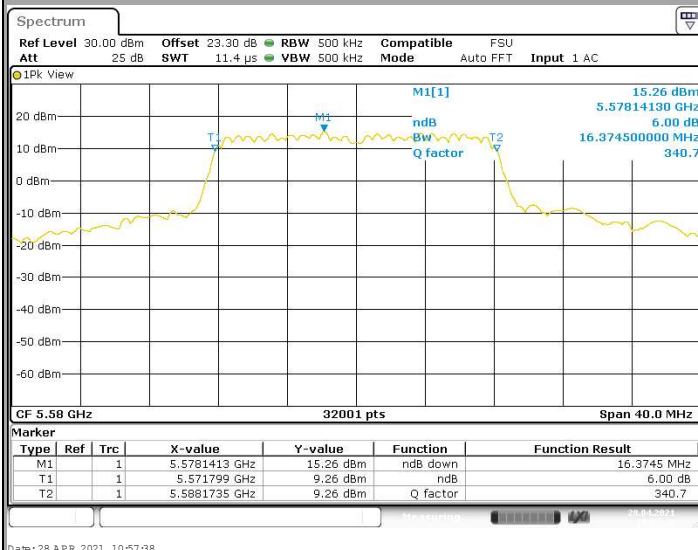
C2

C5



C8

C12



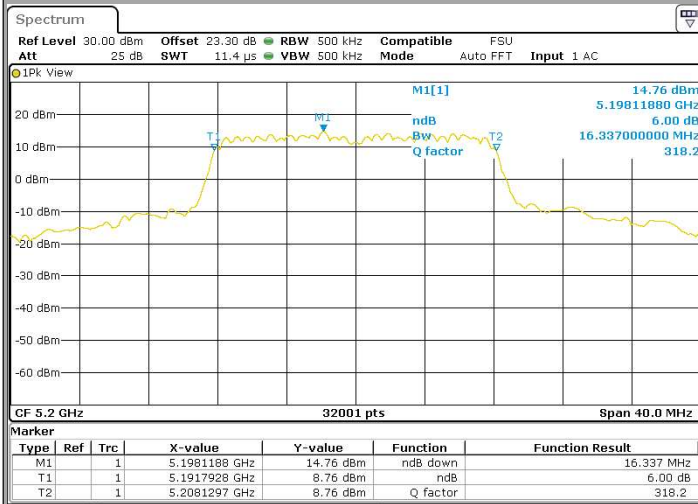
802.11a/802.11nHT20/ac VHT20

Tnom

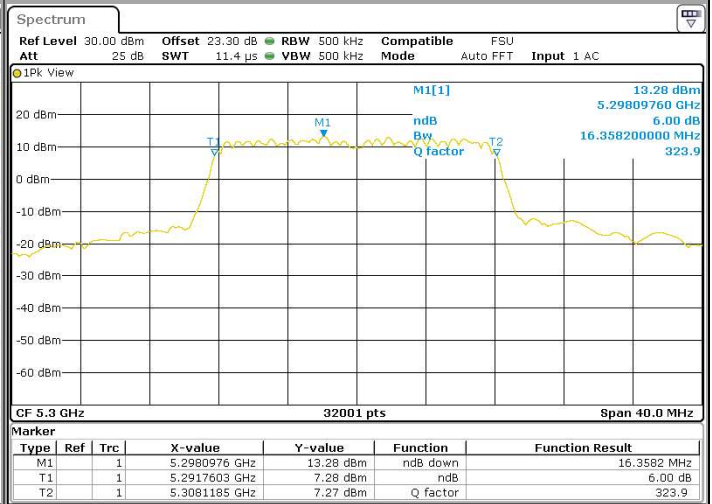
Vmin

C2

C5



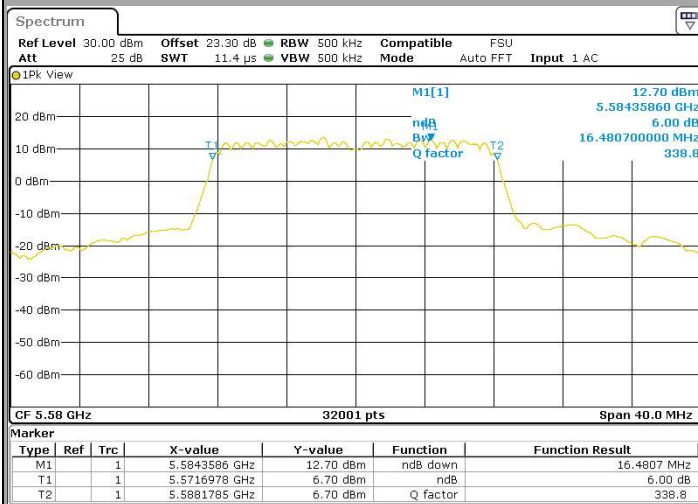
Date: 28 APR 2021 09:20:10



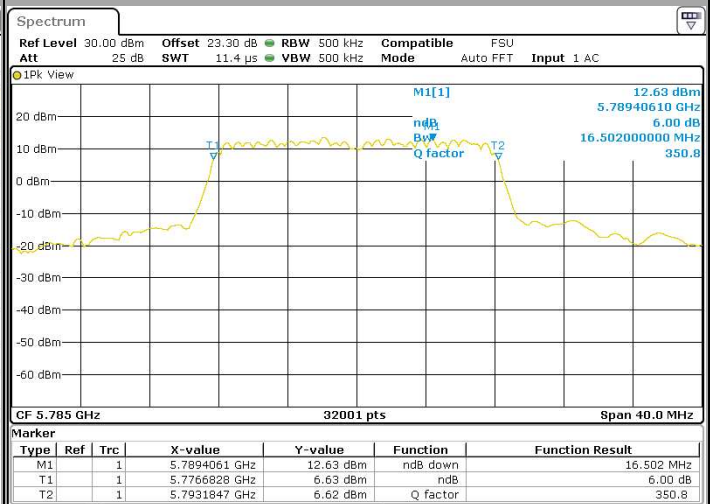
Date: 28 APR 2021 09:31:45

C8

C12



Date: 28 APR 2021 09:34:25



Date: 28 APR 2021 09:51:51



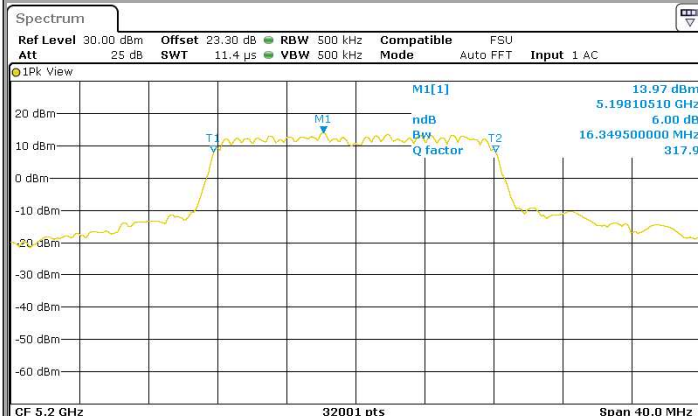
802.11a/802.11nHT20/ac VHT20

Tnom

Vnom

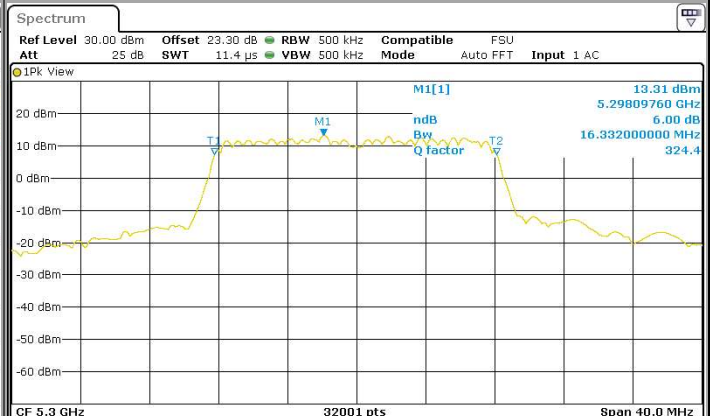
C2

C5



Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1	1		5.1981051 GHz	13.97 dBm	ndB down	16.3495 MHz
T1	1		5.1917703 GHz	7.96 dBm	ndB	6.00 dB
T2	1		5.2081197 GHz	7.97 dBm	Q factor	317.9

Date: 28 APR 2021 09:22:49

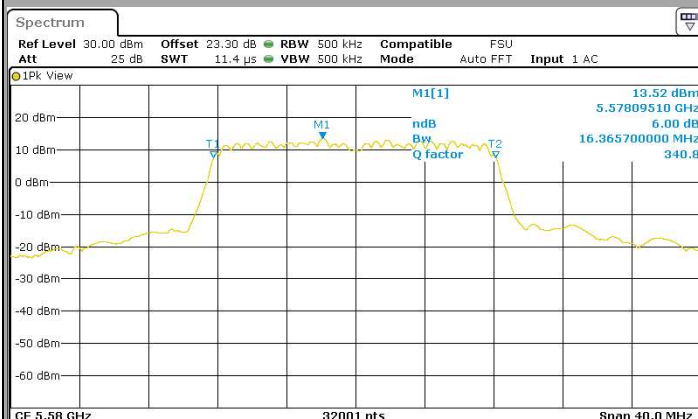


Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1	1		5.2980976 GHz	13.31 dBm	ndB down	16.332 MHz
T1	1		5.2917665 GHz	7.31 dBm	ndB	6.00 dB
T2	1		5.3080985 GHz	7.31 dBm	Q factor	324.4

Date: 28 APR 2021 09:29:07

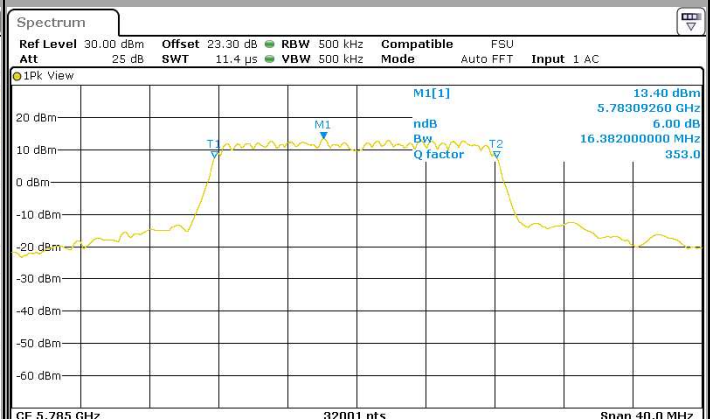
C8

C12



Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1	1		5.5780951 GHz	13.52 dBm	ndB down	16.3657 MHz
T1	1		5.5717528 GHz	7.51 dBm	ndB	6.00 dB
T2	1		5.5881185 GHz	7.52 dBm	Q factor	340.8

Date: 28 APR 2021 09:36:45



Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1	1		5.7830926 GHz	13.40 dBm	ndB down	16.382 MHz
T1	1		5.7767365 GHz	7.39 dBm	ndB	6.00 dB
T2	1		5.7931185 GHz	7.40 dBm	Q factor	353.0

Date: 28 APR 2021 09:44:15



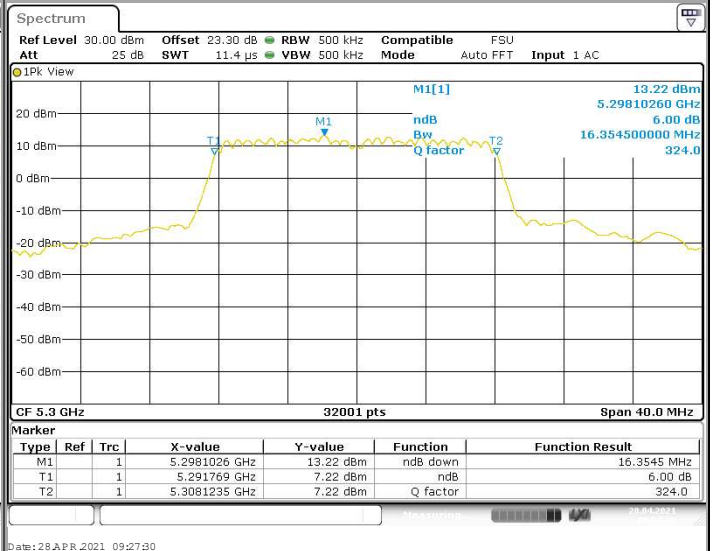
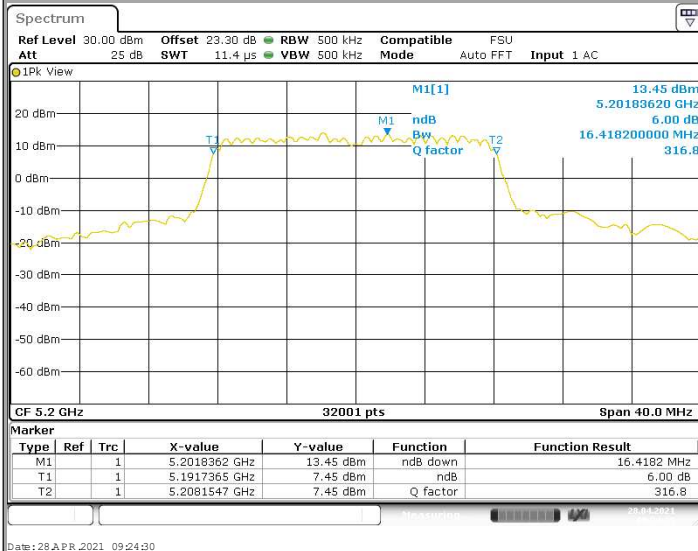
802.11a/802.11nHT20/ac VHT20

Tnom

Vmax

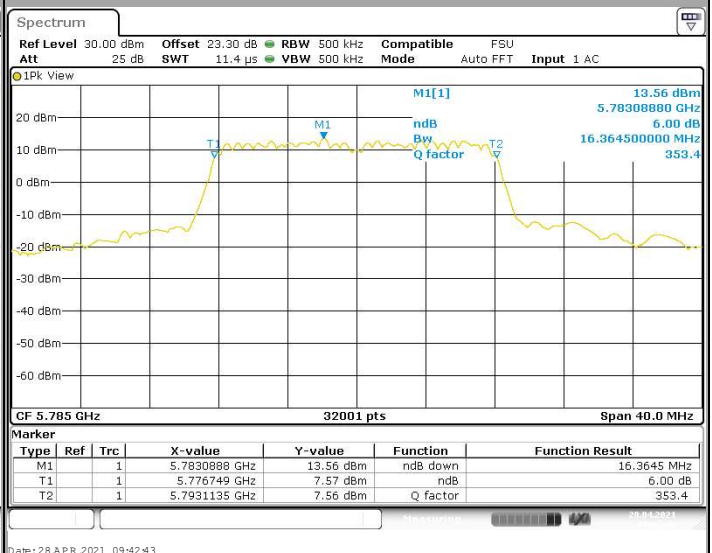
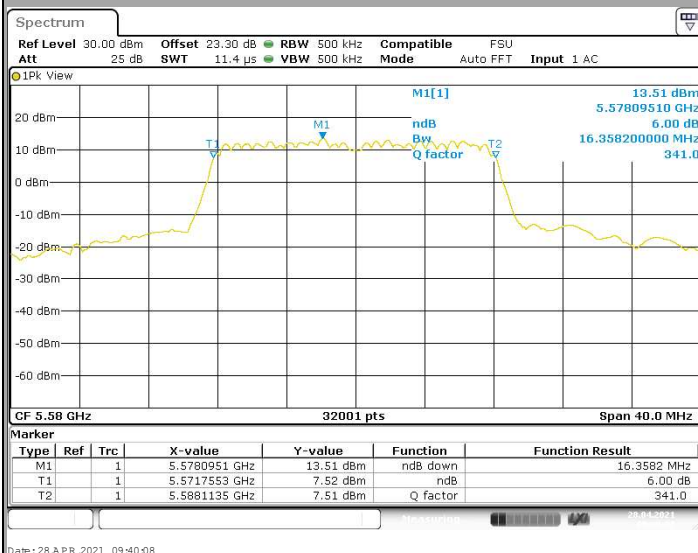
C2

C5



C8

C12



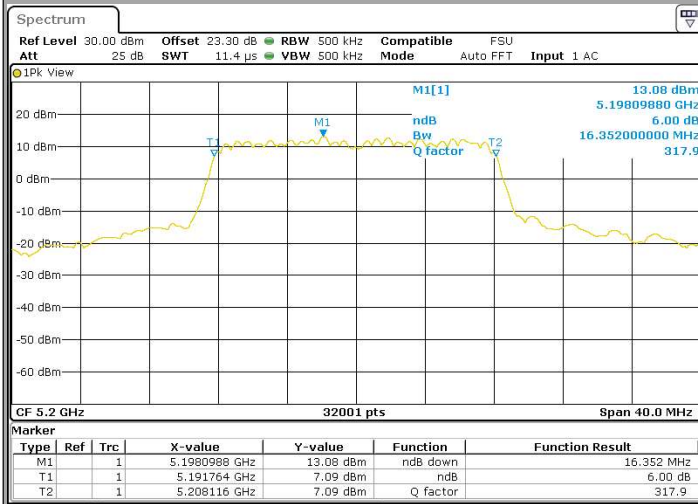
802.11a/802.11nHT20/ac VHT20

Tmax

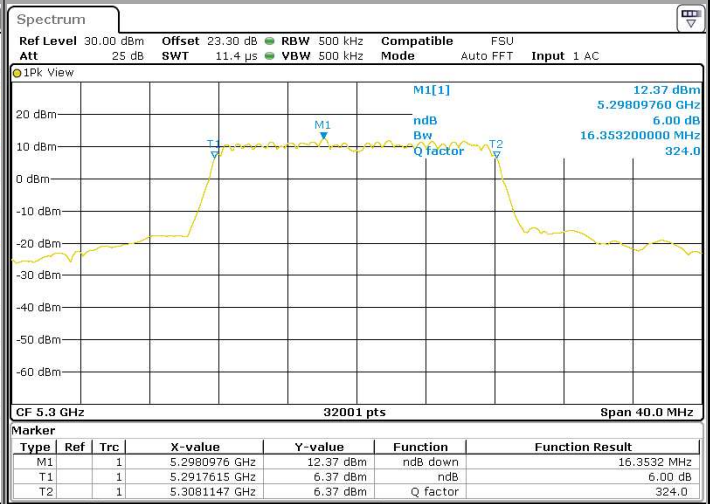
Vmin

C2

C5



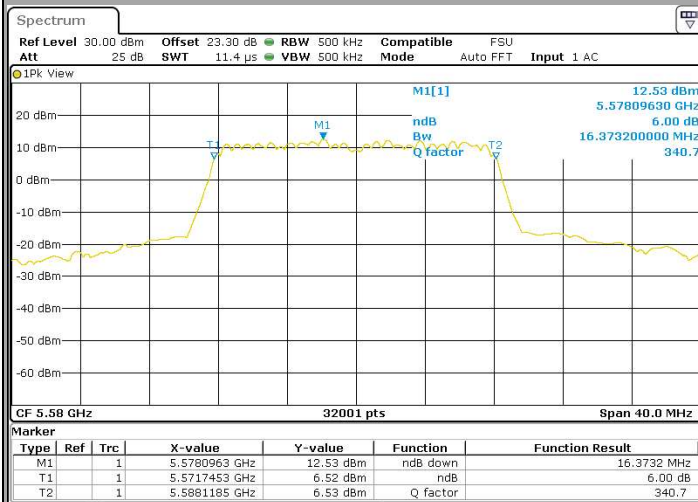
Date: 28 APR 2021 11:28:41



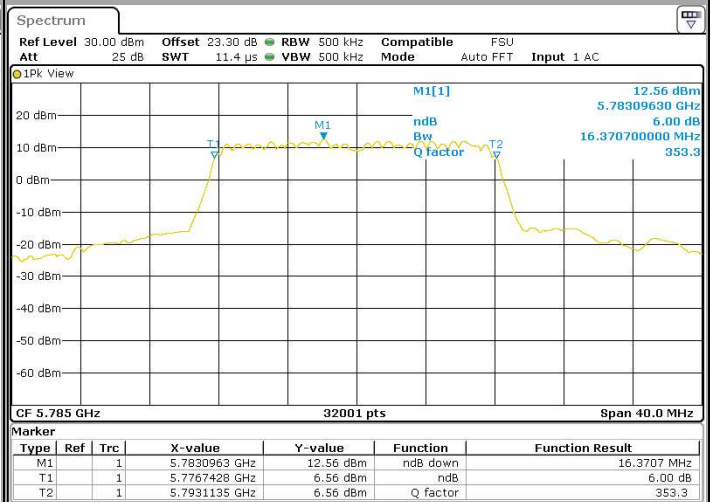
Date: 28 APR 2021 11:40:25

C8

C12



Date: 28 APR 2021 11:42:20



Date: 28 APR 2021 11:51:49