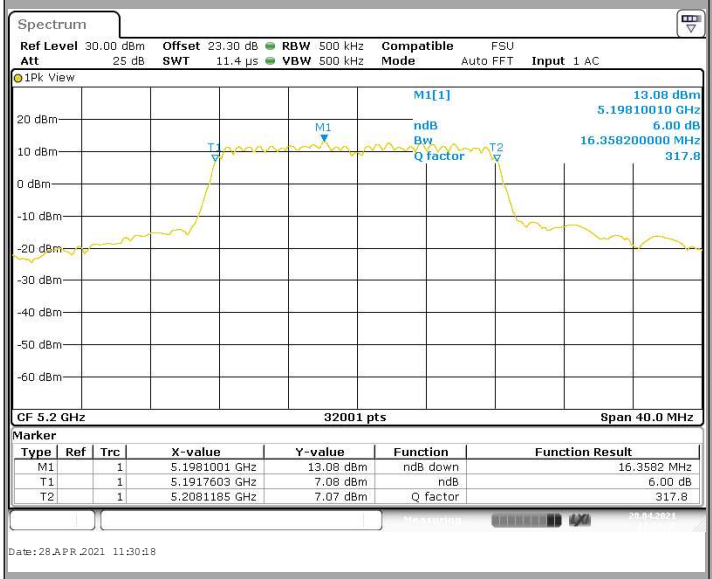
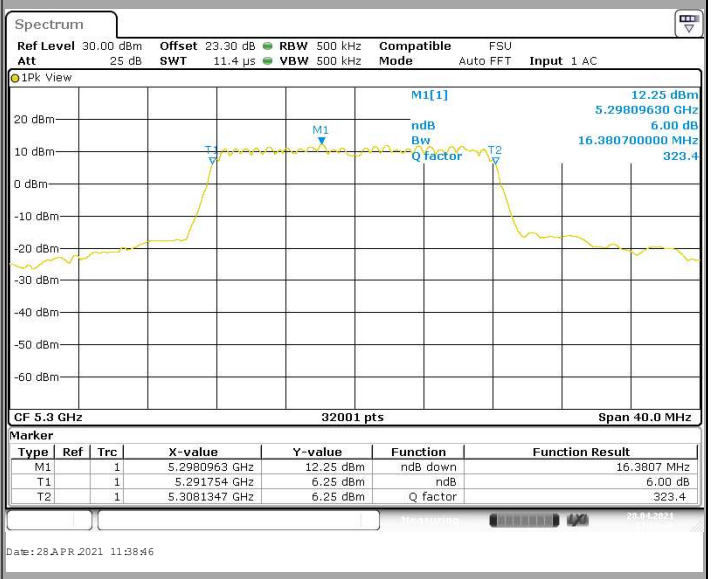
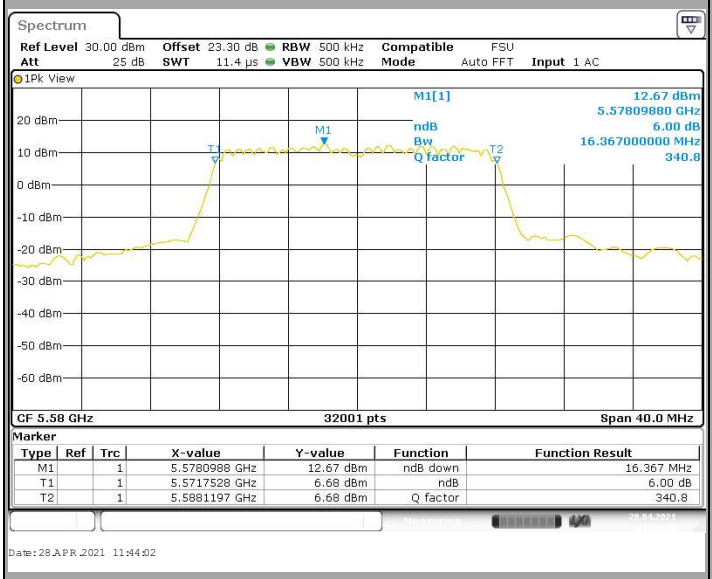
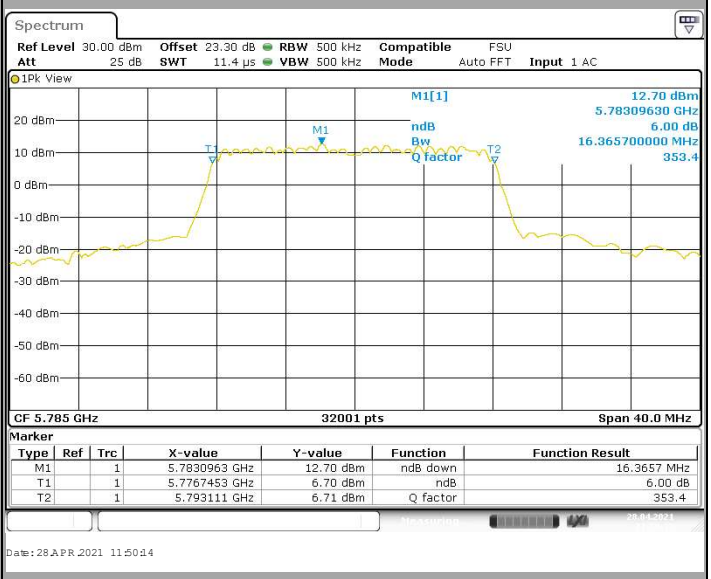
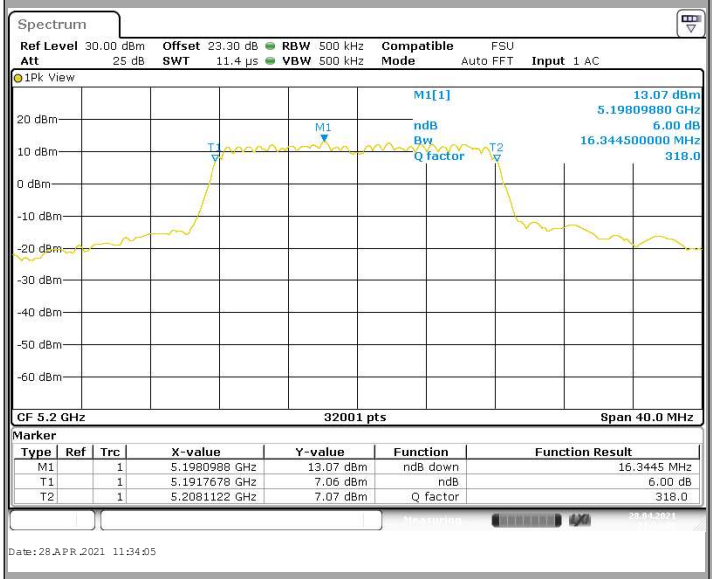
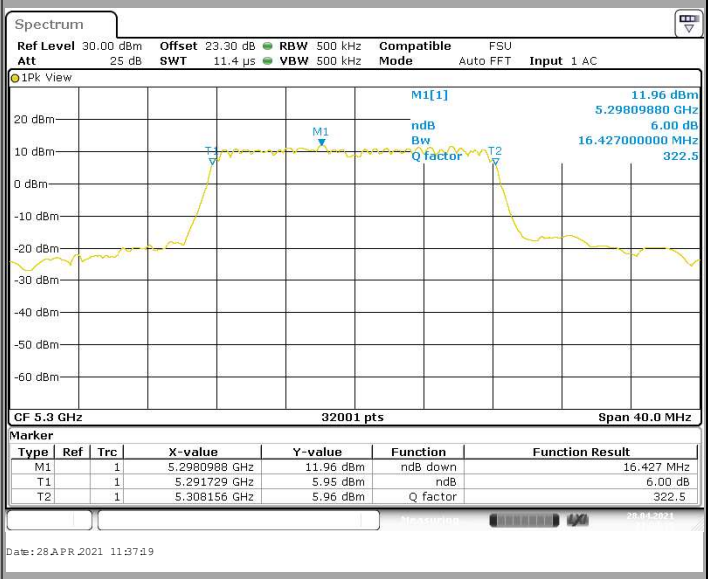
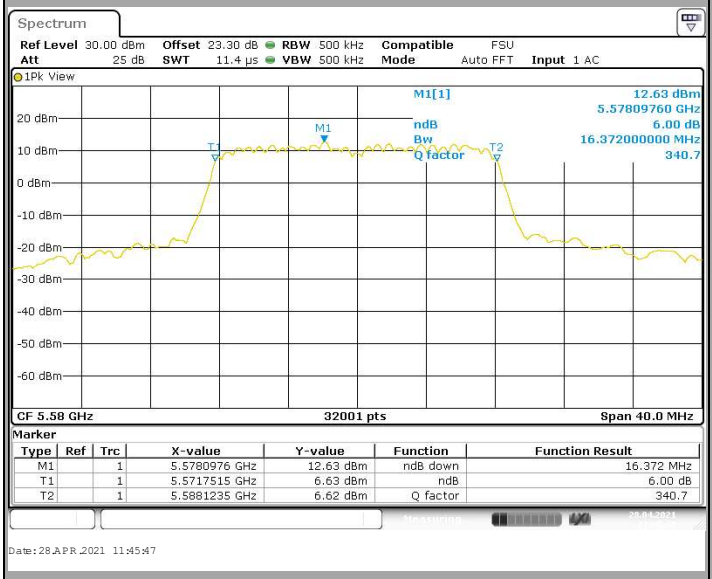
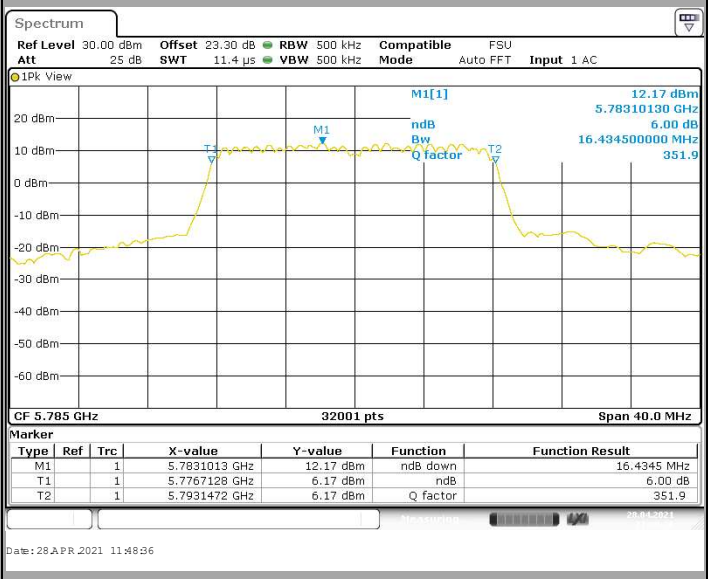
802.11a/802.11nHT20/ac VHT20	
Tmax	
Vnom	
C2	C5
	
C8	C12
	

802.11a/802.11nHT20/ac VHT20	
Tmax	
Vmax	
C2	C5
	
C8	C12
	

802.11a

Temperature	Tmin				Tnom				Tmax			
Voltage	**Vmin**											
Channel	C2	C5	C8	C12	C2	C5	C8	C12	C2	C5	C8	C12
Frequency drift (ppm)	-3,1	-2,0	-3,1	-3,7	-7,5	-11,4	-11,1	-11,5	-11,5	-11,7	-12,2	-12,4
Voltage	**Vnom**											
Channel	C2	C5	C8	C12	C2	C5	C8	C12	C2	C5	C8	C12
Frequency drift (ppm)	-2,6	-2,5	-3,6	-4,0	-10,6	-12,7	-11,5	-12,5	-11,7	-10,5	-11,4	-12,4
Voltage	**Vmax**											
Channel	C2	C5	C8	C12	C2	C5	C8	C12	C2	C5	C8	C12
Frequency drift (ppm)	-3,2	-2,9	-2,5	-3,2	-10,5	-10,1	-11,8	-11,9	-11,5	-10,8	-11,2	-12,1

4.7. CONCLUSION

Carrier frequencies 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.

5. 26DB EMISSION BANDWIDTH

5.1. TEST CONDITIONS

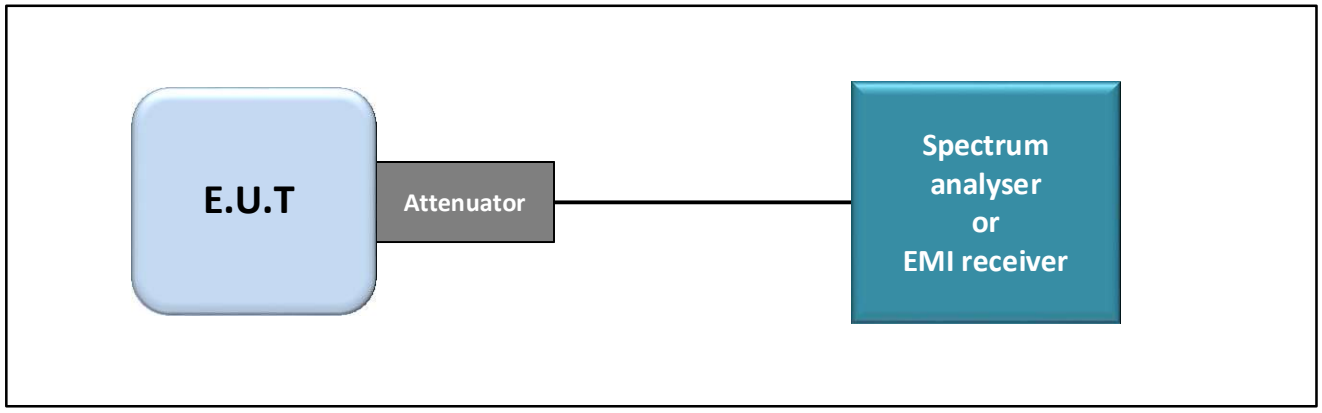
Test performed by	: Armand MAHOUNGOU
Date of test	: April 22, 2021
Ambient temperature	: 24°C
Relative humidity	: 46%

5.2. TEST SETUP

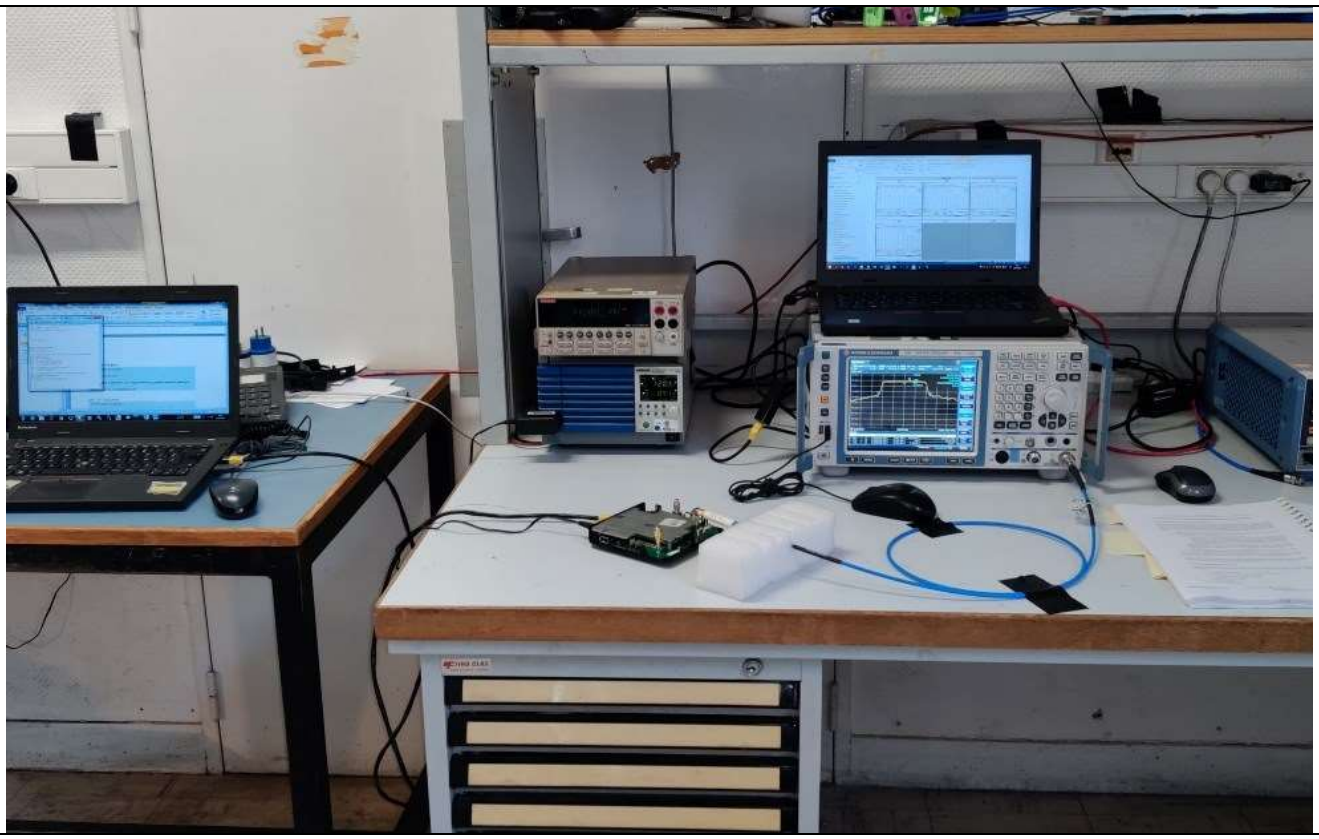
- The Equipment Under Test is installed:
☑ On a table
☐ In an anechoic chamber

- Measurement is performed with a spectrum analyzer in:
☑ Conducted Method
☐ Radiated Method

- Test Procedure:
☑ KDB 789033 D02 General UNII Test Procedures New Rules v02r01 § C1



Test set up of 26dB Emission Bandwidth



Photograph for 26dB emission bandwidth

5.3. LIMIT

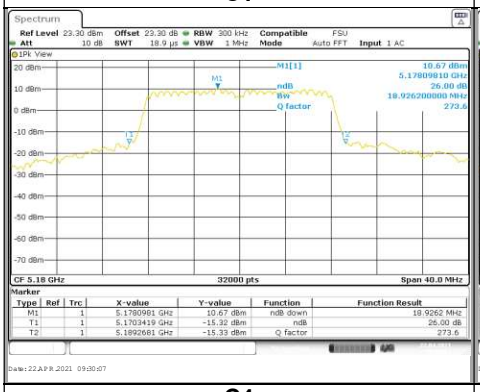
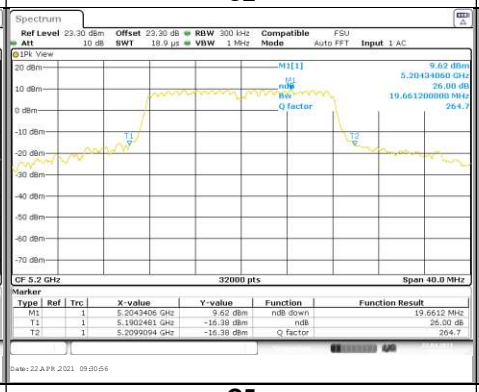
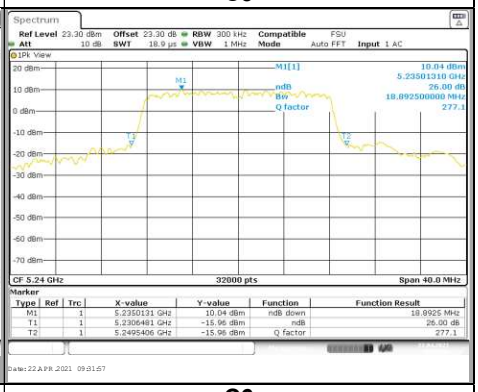
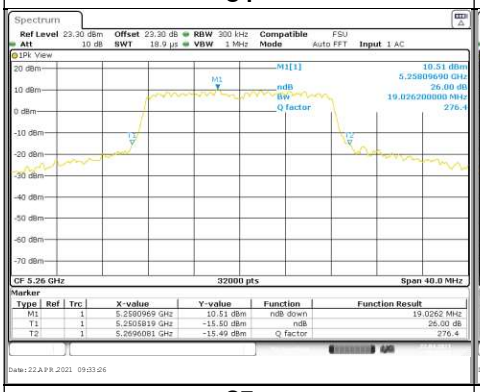
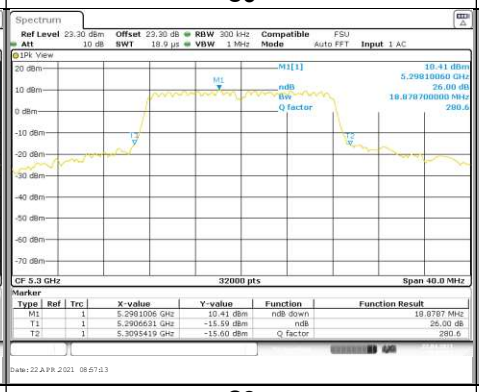
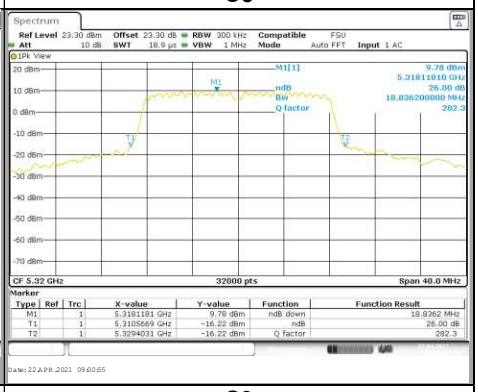
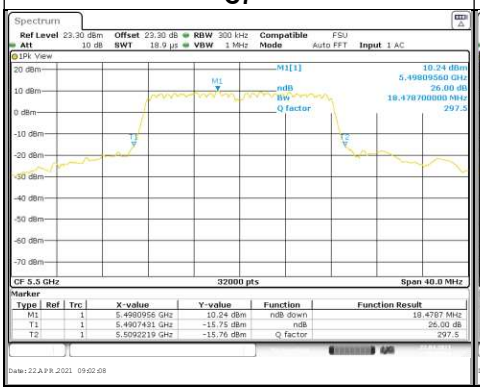
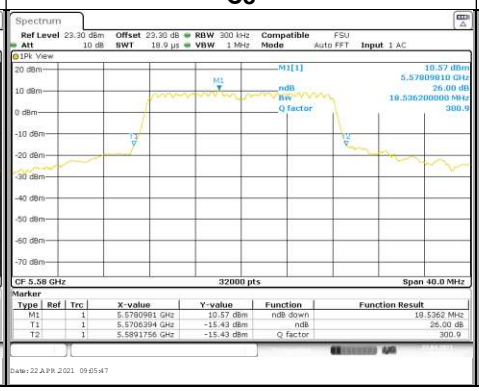
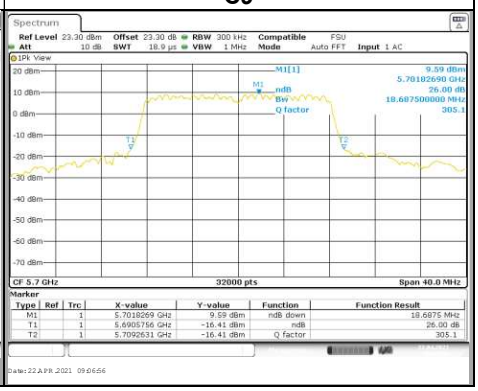
None

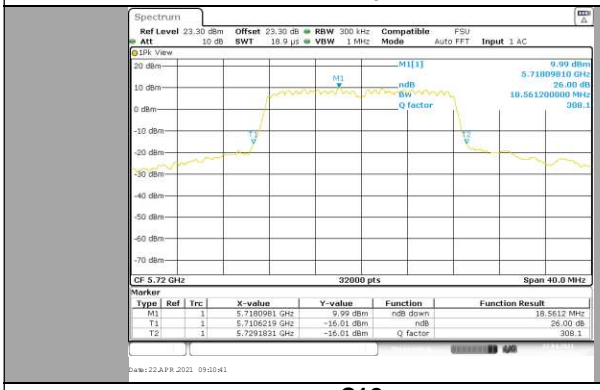
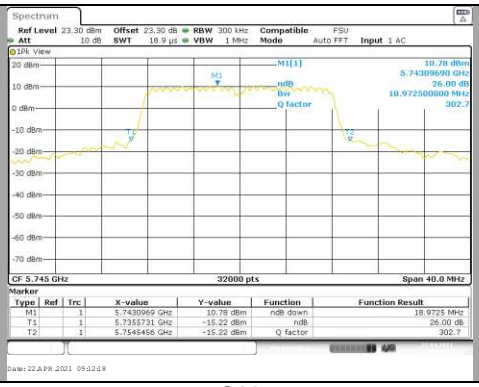
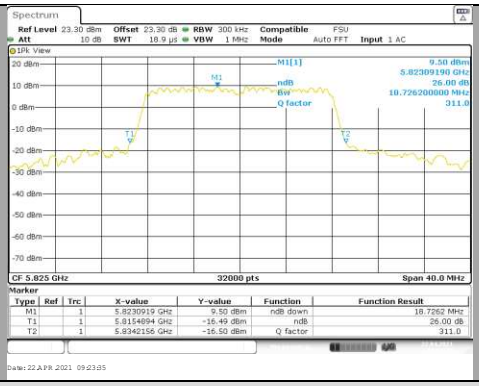
5.4. TEST EQUIPMENT LIST

DESCRIPTION	MANUFACTURER	MODEL	N° LCIE	Cal_Date	Cal_Due
EMI receiver	ROHDE & SCHWARZ	ESR7	A2642026	2019/07	2021/07
Cable + Attenuateur 20dB	PASTERNACK	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

5.5. RESULTS

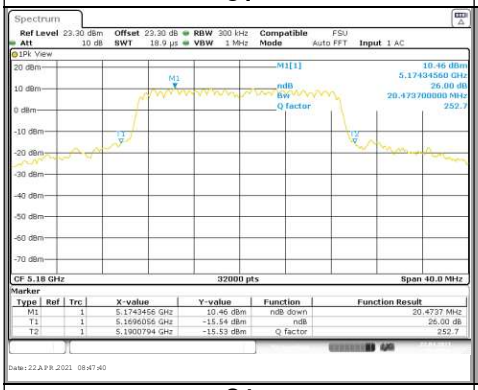
802.11a		
C1	C2	C3
		
C4	C5	C6
		
C7	C8	C9
		

802.11a	
C10	C11
	
C12	C13
	

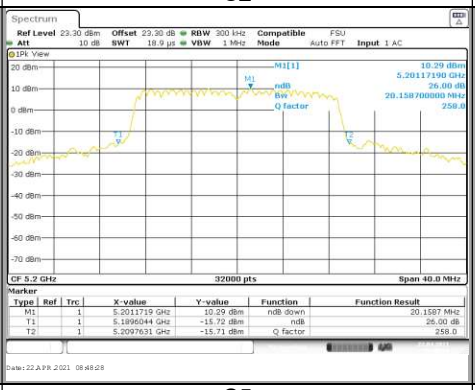
Channel	26dB Emission Bandwidth (MHz)
C1	18.926
C2	19.661
C3	18.892
C4	19.026
C5	18.879
C6	18.836
C7	18.479
C8	18.536
C9	18.687
C10	18.561
C11	18.972
C12	18.736
C13	18.726

802.11n HT20/ac VHT20

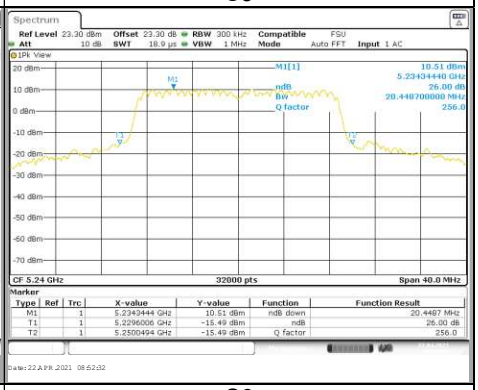
C1



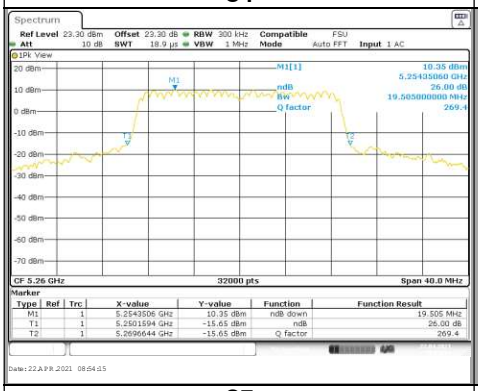
C2



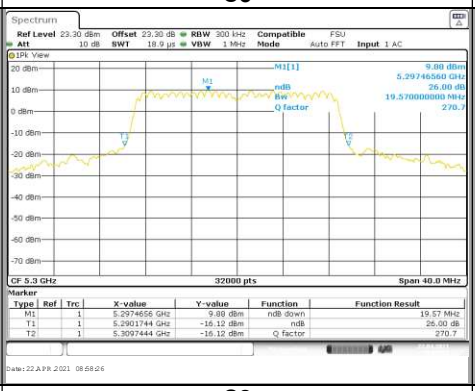
C3



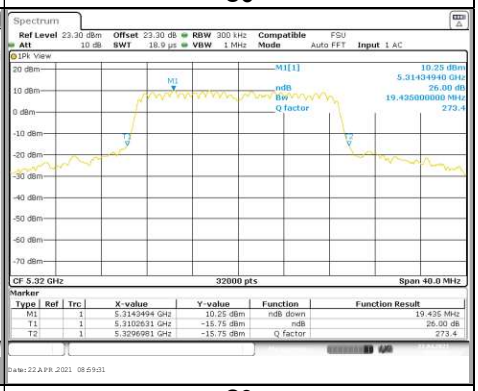
C4



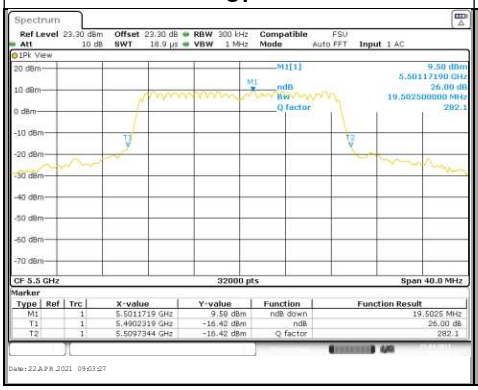
C5



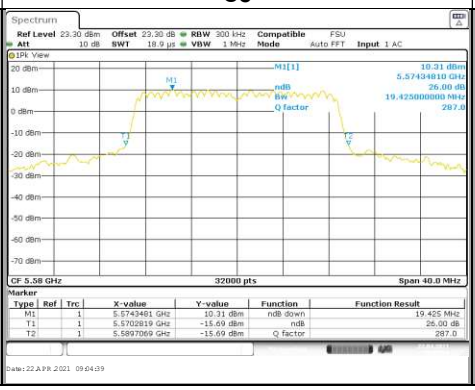
C6



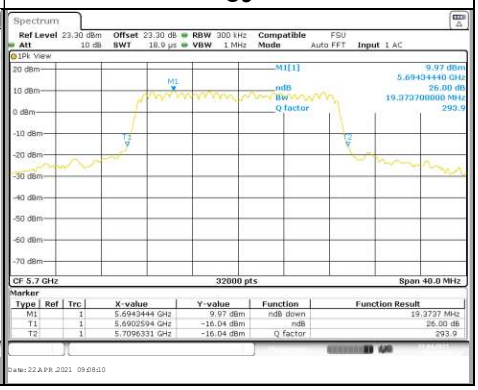
C7

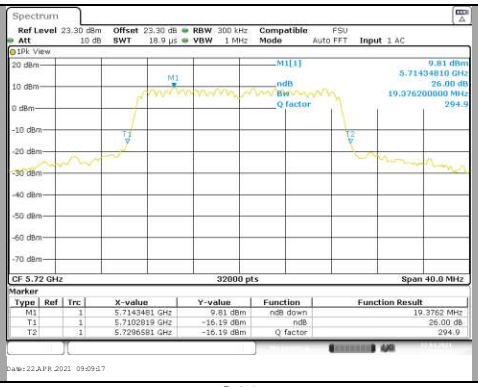
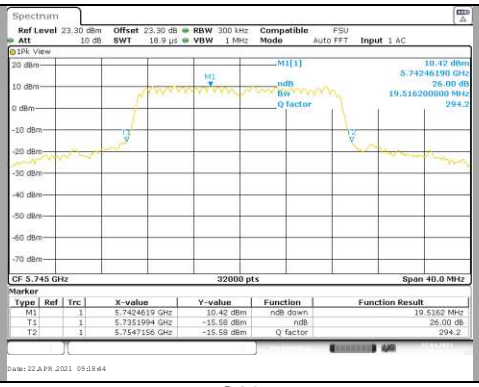
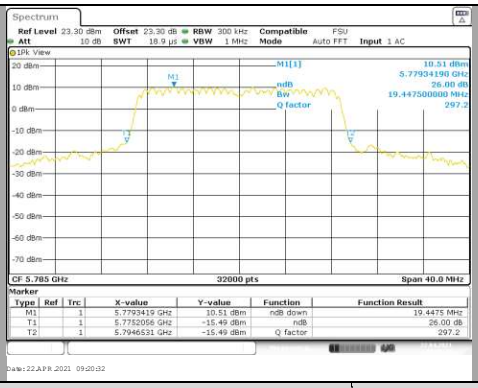
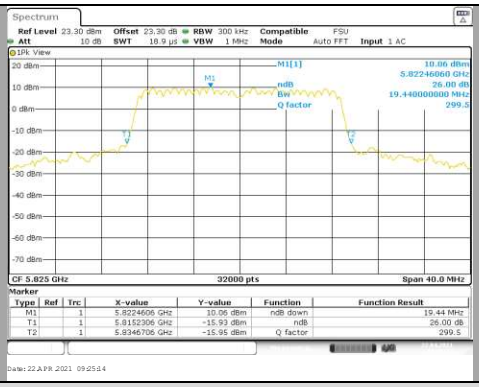


C8

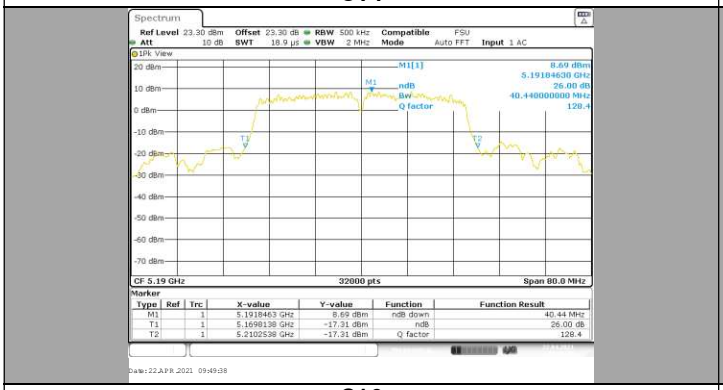
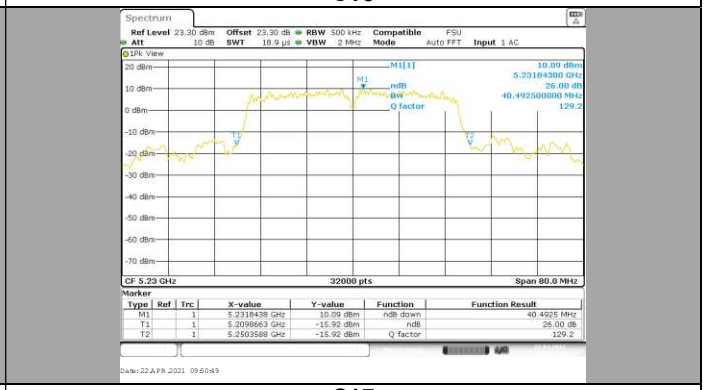
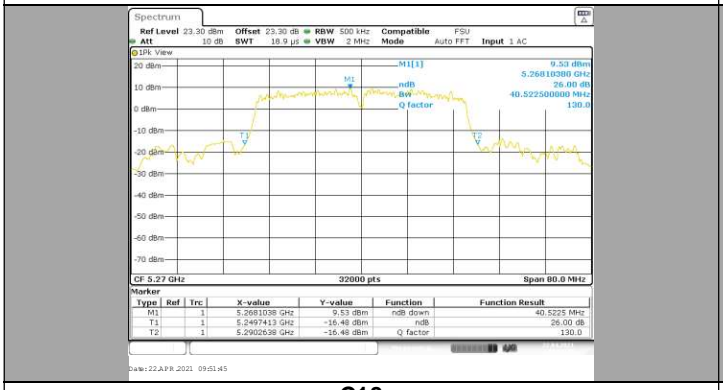
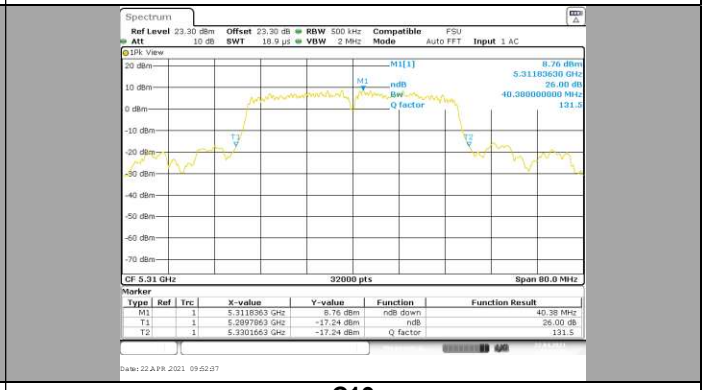
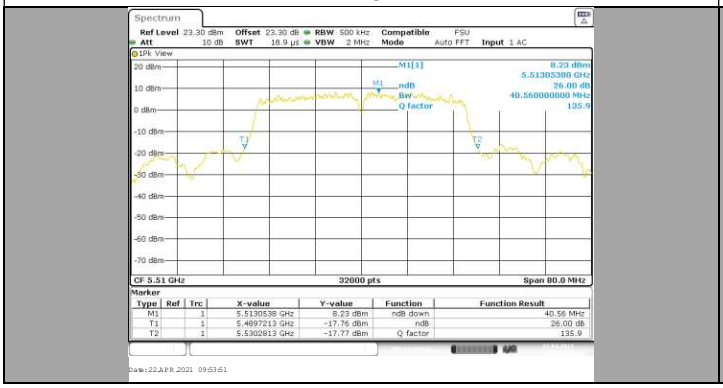
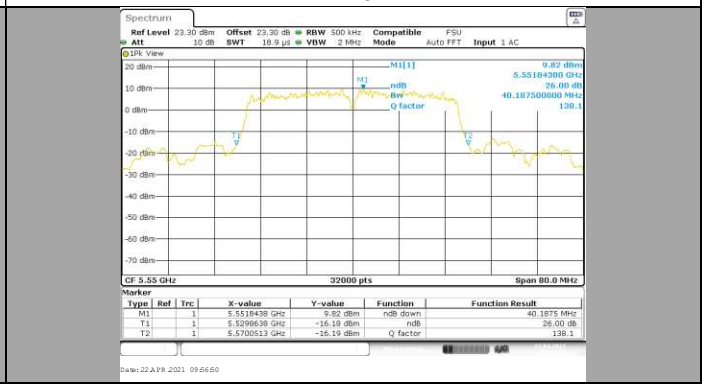


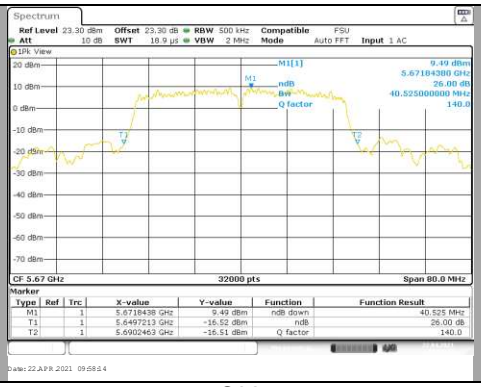
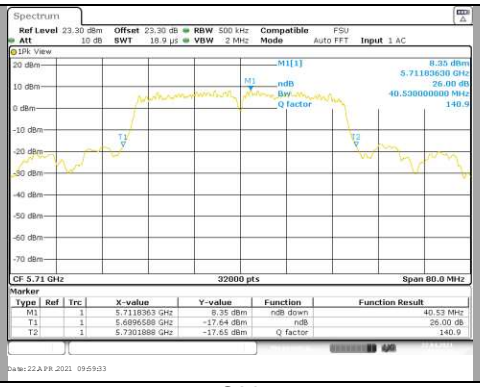
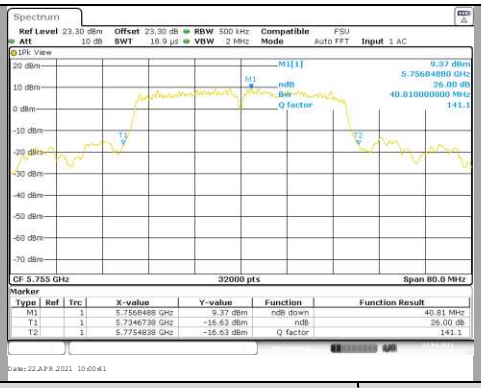
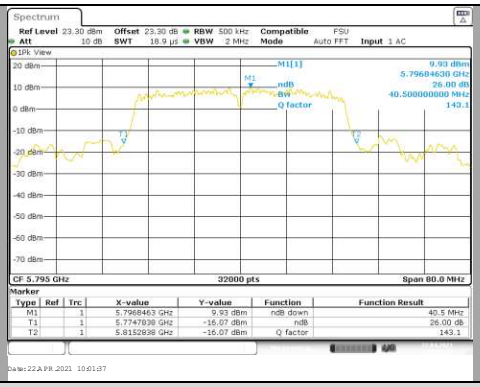
C9



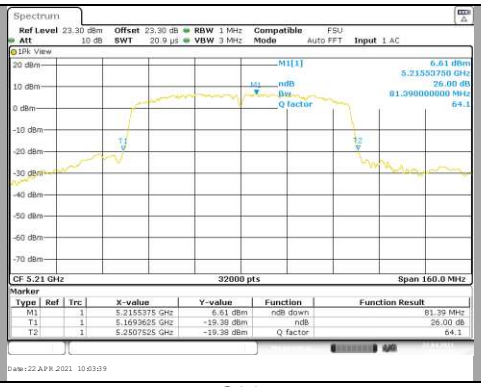
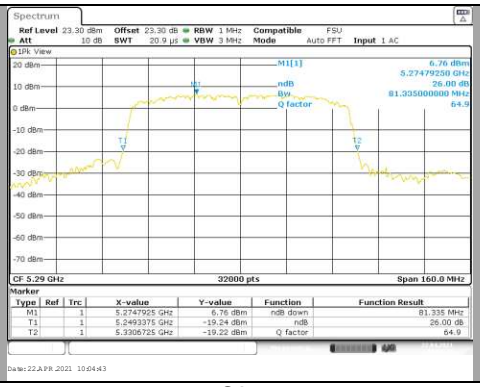
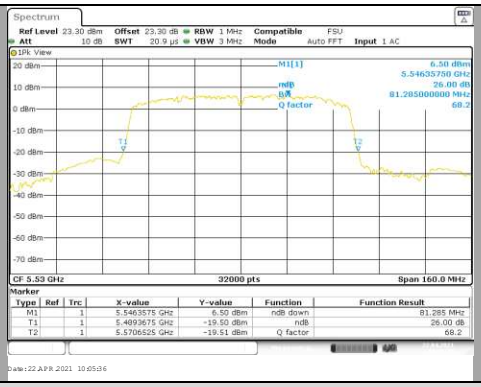
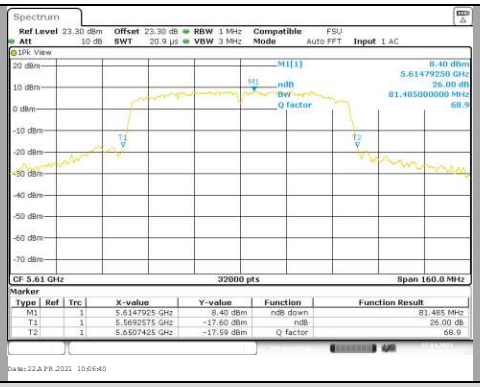
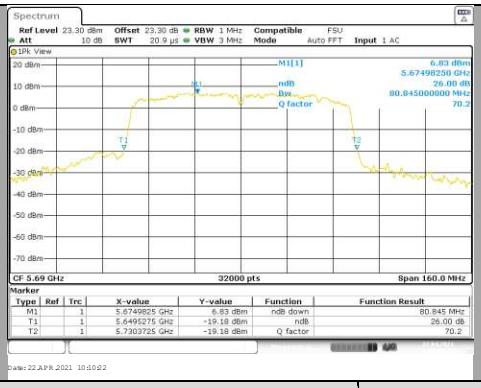
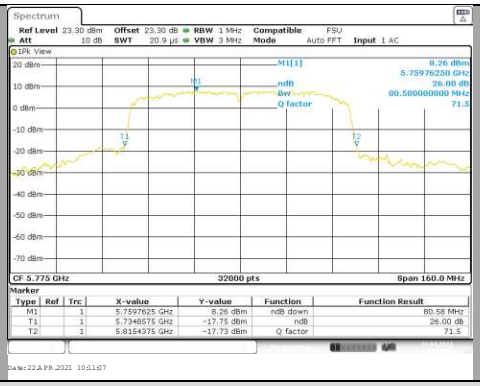
802.11n HT20/ac VHT20	
C10	**C11**
	
C12	**C13**
	

Channel	26dB Emission Bandwidth (MHz)
C1	20.474
C2	20.159
C3	20.449
C4	19.505
C5	19.570
C6	19.435
C7	19.502
C8	19.425
C9	19.374
C10	19.376
C11	19.516
C12	19.447
C13	19.440

802.11n HT40/ac VHT40	
C14	C15
	
C16	C17
	
C18	C19
	

802.11n HT40/ac VHT40	
C20	**C21**
	
C22	**C23**
	

Channel	26dB Emission Bandwidth (MHz)
C14	40.440
C15	40.492
C16	40.522
C17	40.380
C18	40.560
C19	40.187
C20	40.525
C21	40.530
C22	40.810
C23	40.500

802.11ac VHT80	
C24	C25
	
C26	C27
	
802.11ac VHT80	
C28	C29
	

Channel	26dB Emission Bandwidth (MHz)
C24	81.390
C25	81.335
C26	81.285
C27	81.485
C28	80.845
C29	80.580

5.6. CONCLUSION

26dB Emission Bandwidth measurement performed on the sample of the product **Technicolor UlW4059MIL**, 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.

6. 6DB EMISSION BANDWIDTH

6.1. TEST CONDITIONS

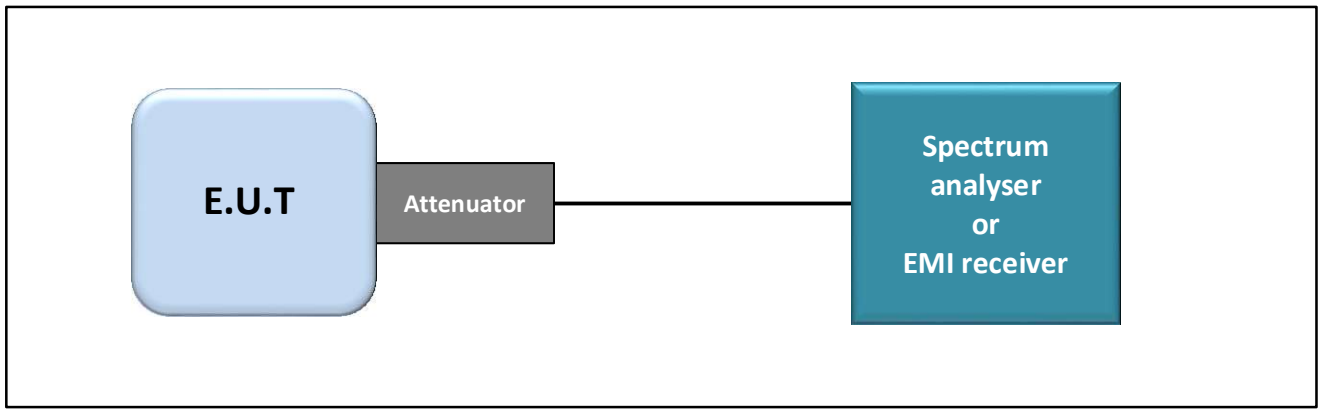
Test performed by	: Armand MAHOUNGOU
Date of test	: April 22, 2021
Ambient temperature	: 24°C
Relative humidity	: 46%

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 v02r01 § C2



Test set up of 6dB Emission Bandwidth

Photograph for 6dB emission bandwidth

6.3. LIMIT

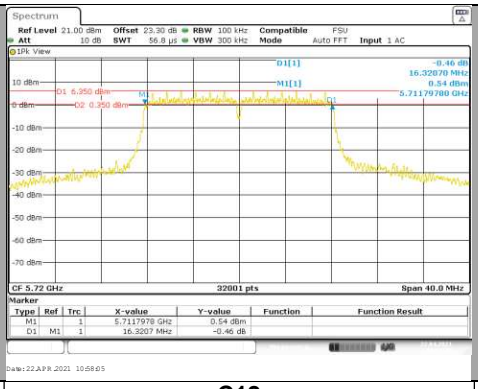
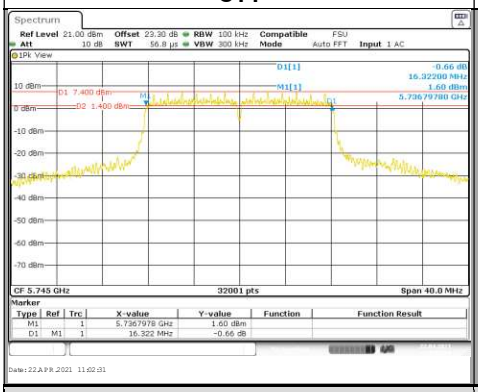
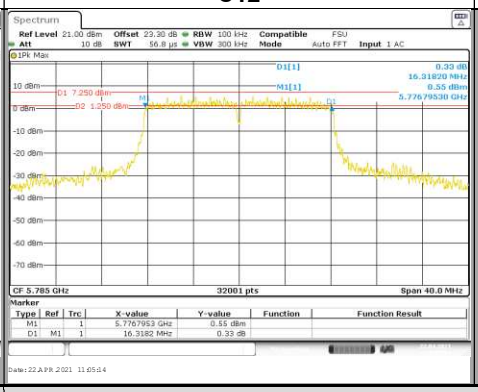
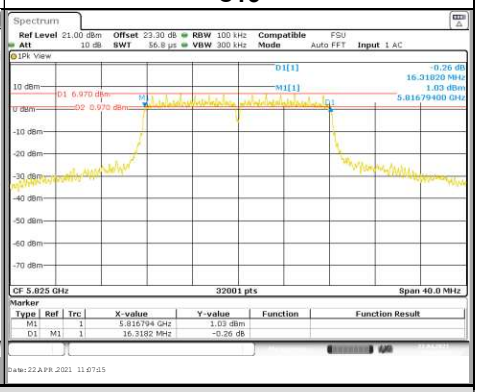
The 6dB bandwidth shall be at least 500kHz

6.4. TEST EQUIPMENT LIST

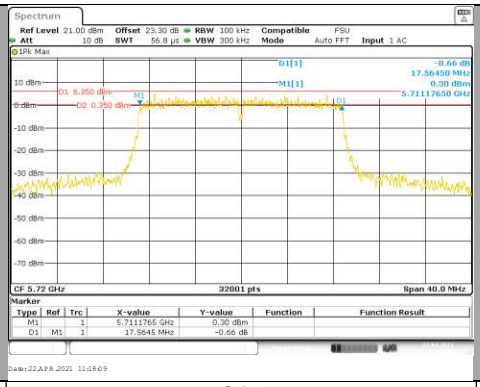
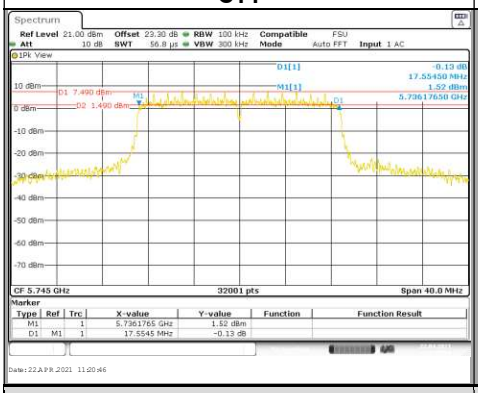
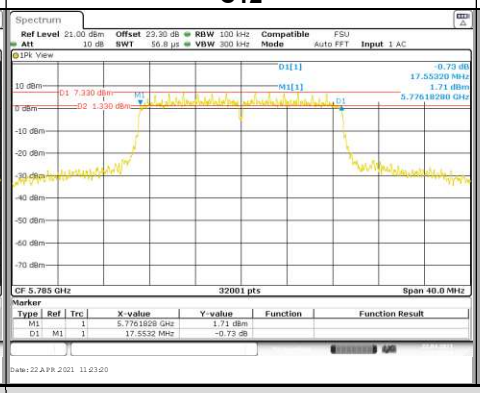
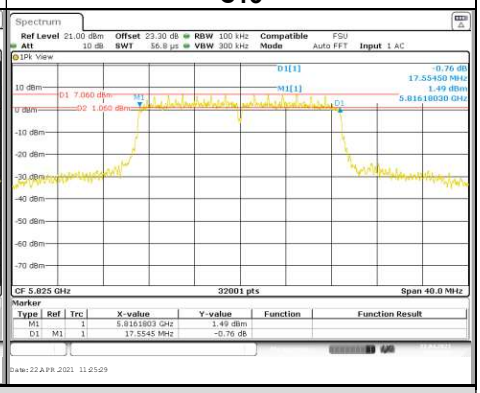
DESCRIPTION	MANUFACTURER	MODEL	N° LCIE	Cal_Date	Cal_Due
EMI receiver	ROHDE & SCHWARZ	ESR7	A2642026	2019/07	2021/07
Cable + Attenuateur 20dB	PASTERNACK	PE350-150CM	A5329973	2020/09	2021/09
Multimeter	KEITHLEY	2000	A1242090	2019/05	2021/05
Power supply	KIKUSUI	PCR500M	A7040079	See Multimeter	See Multimeter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

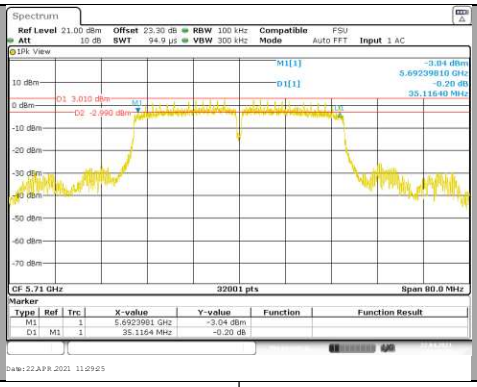
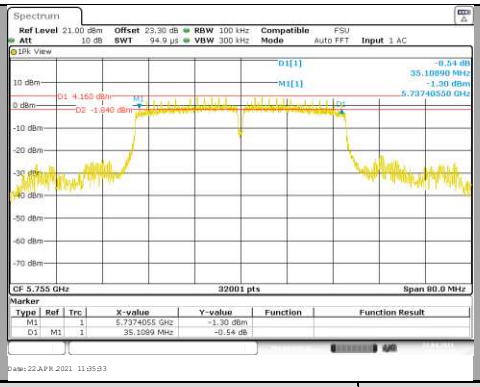
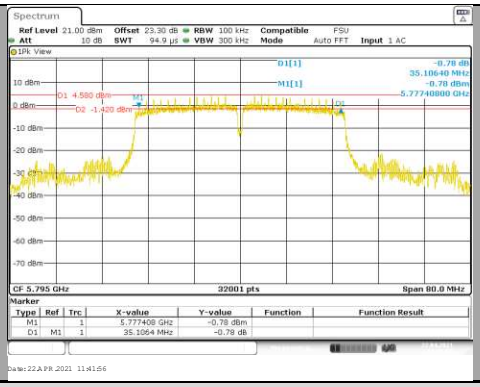
6.5. RESULTS

802.11a		
C10		
		
C11	C12	C13
		

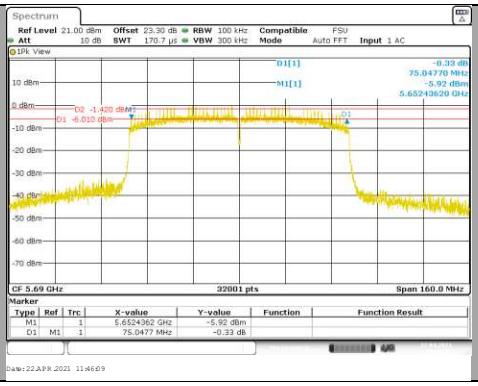
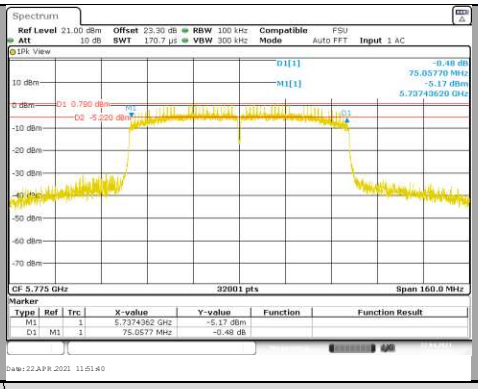
Channel	6dB Emission Bandwidth (MHz)
C10	16.321
C11	16.322
C12	16.318
C13	16.318

802.11n HT20/ac VHT20		
C10		
		
C11	C12	C13
		

Channel	6dB Emission Bandwidth (MHz)
C10	17.564
C11	17.554
C12	17.553
C13	17.554

802.11n HT40/ac VHT40	
C21	
	
C22	C23
	

Channel	6dB Emission Bandwidth (MHz)
C21	35.116
C22	35.109
C23	35.106

802.11ac VHT80	
C28	
	
C29	
	
Channel	6dB Emission Bandwidth (MHz)
C28	75.048
C29	75.058

6.6. CONCLUSION

6dB Emission 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.

7. DUTY CYCLE

7.1. TEST CONDITIONS

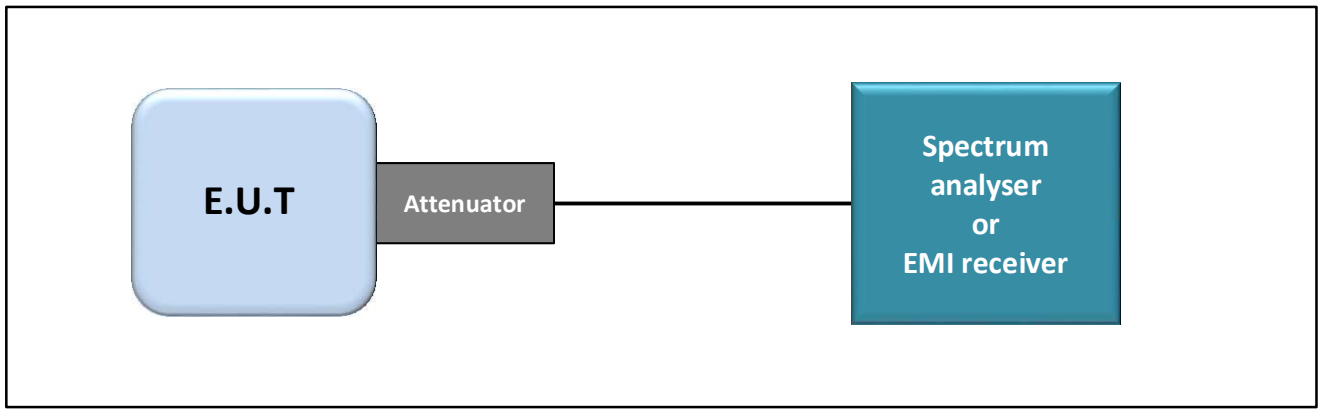
Test performed by	: Armand MAHOUNGOU
Date of test	: April 23, 2021
Ambient temperature	: 27°C
Relative humidity	: 46%

7.2. TEST SETUP

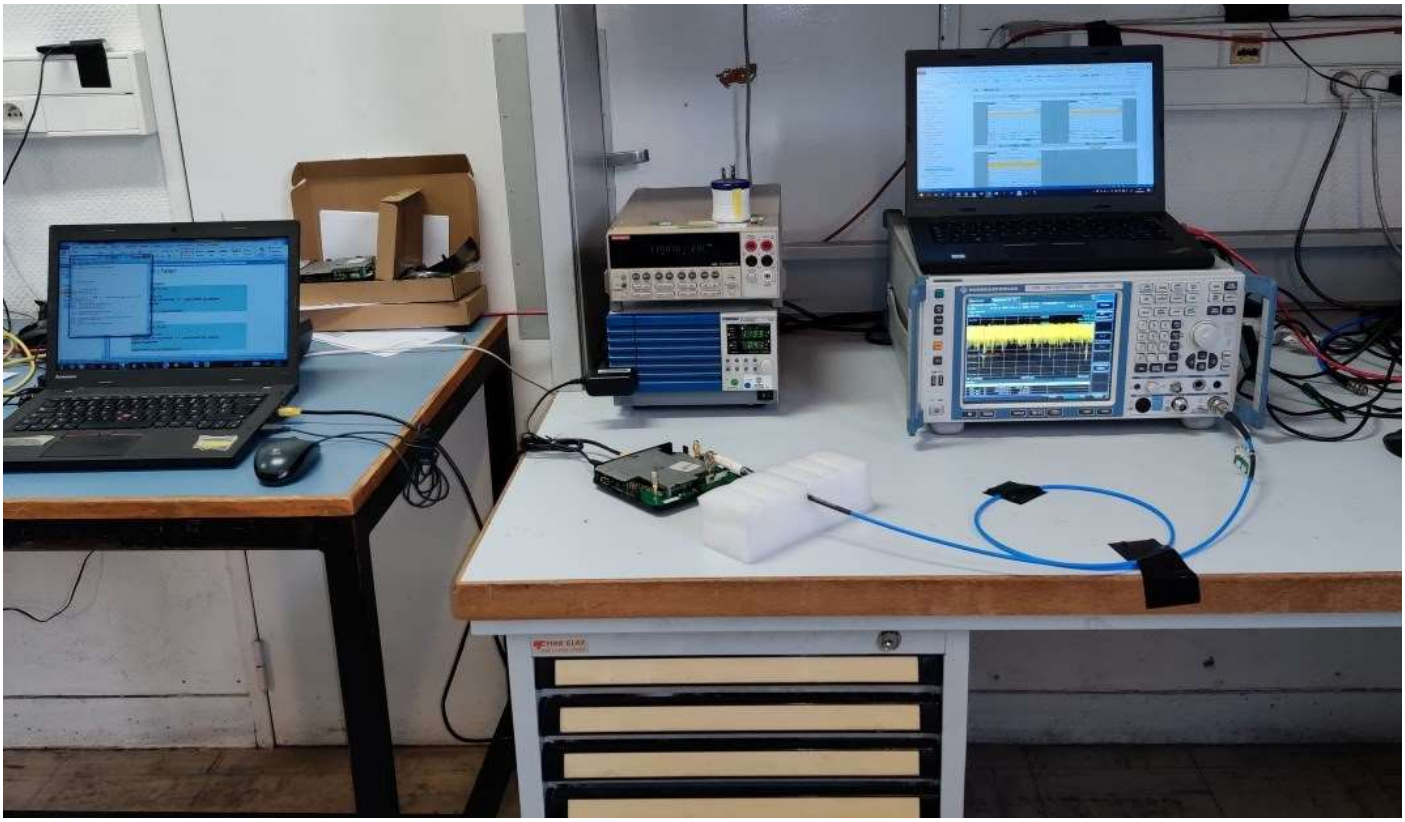
- The Equipment Under Test is installed:
☑ On a table
☐ In an anechoic chamber

- Measurement is performed with a spectrum analyzer in:
☑ Conducted Method
☐ Radiated Method

- Test Procedure:
☑ KDB 789033 D02 General UNII Test Procedures New Rules v02r01 § B2 b)



Test set up of Duty Cycle



Photograph for Duty Cycle

7.3. LIMIT

None

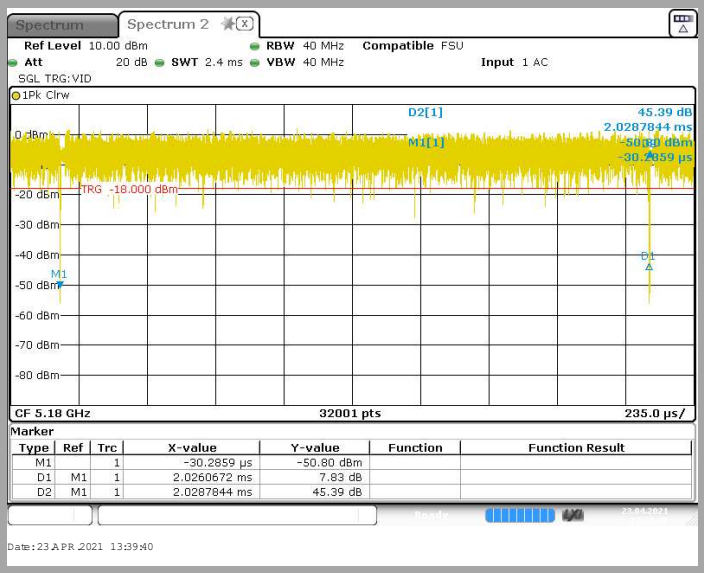
7.4. TEST EQUIPMENT LIST

DESCRIPTION	MANUFACTURER	MODEL	N° LCIE	Cal_Date	Cal_Due
EMI receiver	ROHDE & SCHWARZ	ESR7	A2642026	2019/07	2021/07
Cable + Attenuateur 20dB	PASTERNACK	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

7.5. RESULTS

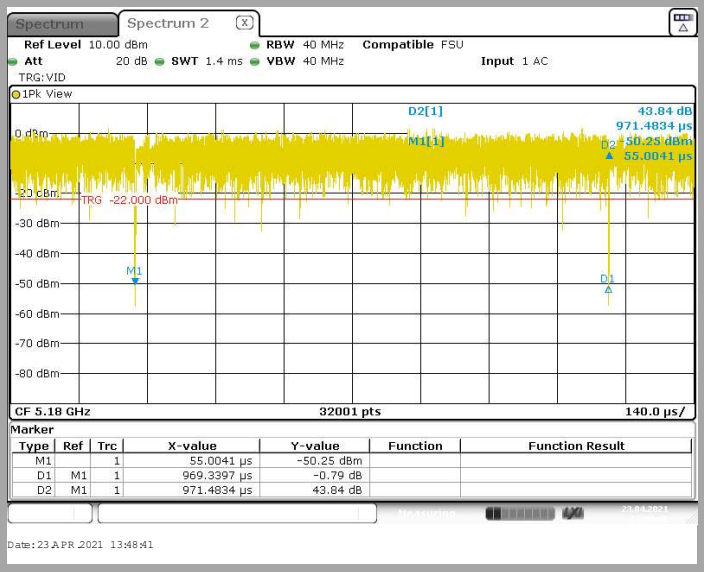
802.11a
C1



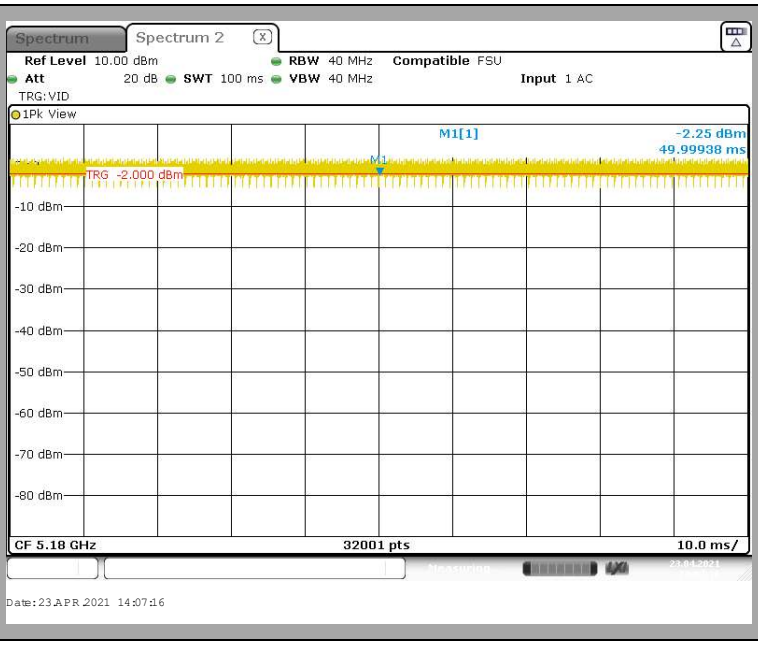
802.11a
C1

Channel		
Mode	Duty Cycle (%)	Duty Cycle Correction (dB)
802.11a	99.866	$20\log(\frac{1}{duty\ cycle})$ = 0.01164

802.11n HT20/ac VHT20
C1

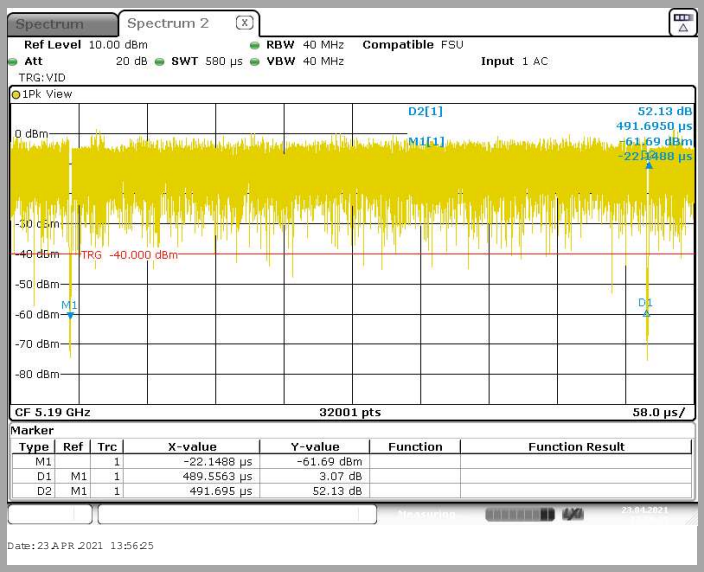


802.11n HT20/ac VHT20
C1

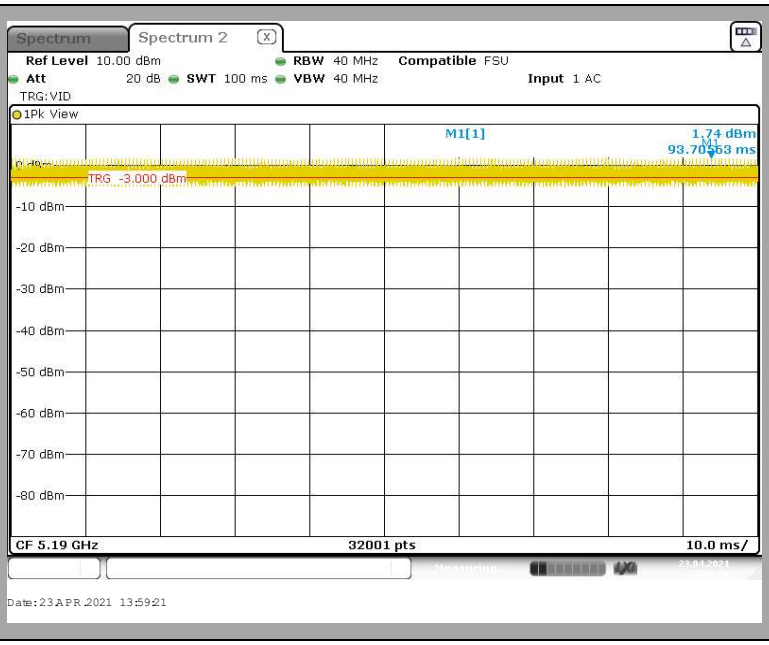


Channel		
Mode	Duty Cycle (%)	Duty Cycle Correction (dB)
802.11n HT20/ac VHT20	99,779	$20\log(\frac{1}{duty\ cycle})$ = 0.01922

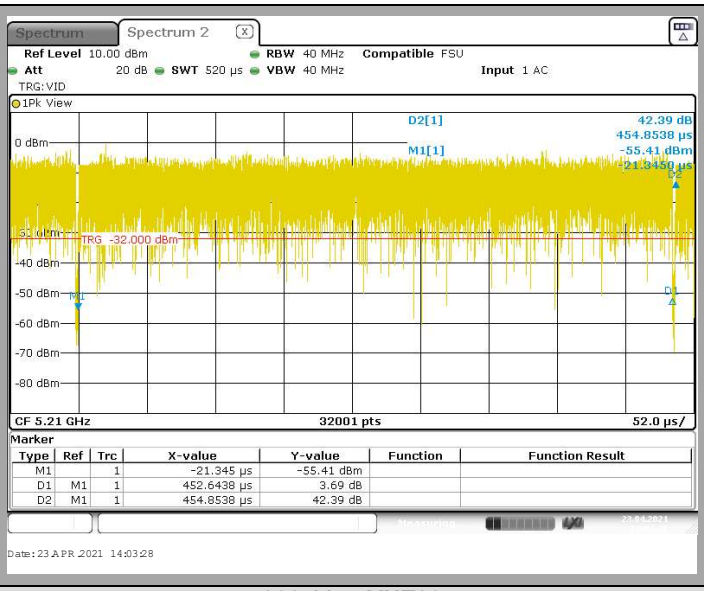
802.11n HT40/ac VHT40
C14

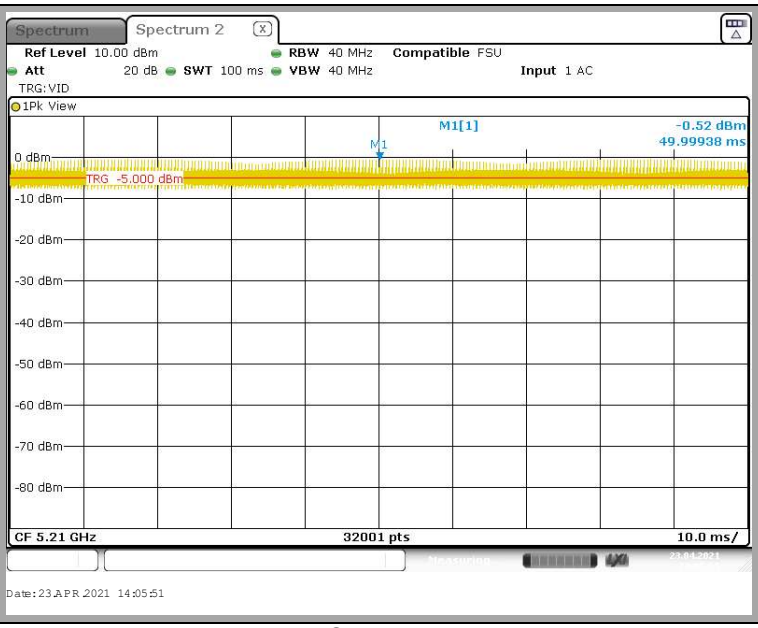


802.11n HT40/ac VHT40
C14



Channel		
Mode	Duty Cycle (%)	Duty Cycle Correction (dB)
802.11n HT20/ac VHT20	99,565	$20\log(\frac{1}{duty\ cycle})$ = 0.03786

802.11ac VHT80
C24


802.11ac VHT80
C24


Channel		
Mode	Duty Cycle (%)	Duty Cycle Correction (dB)
802.11n HT20/ac VHT20	99,514	$20\log(\frac{1}{duty\ cycle})$ = 0.04232

7.6. CONCLUSION

Duty Cycle measurement performed on the sample of the product **Technicolor UlW4059MIL**, 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.

8. MAXIMUM CONDUCTED OUTPUT POWER, MAXIMUM POWER SPECTRAL DENSITY, MAXIMUM EIRP, MAXIMUM EIRP SPECTRAL DENSITY

8.1. TEST CONDITIONS

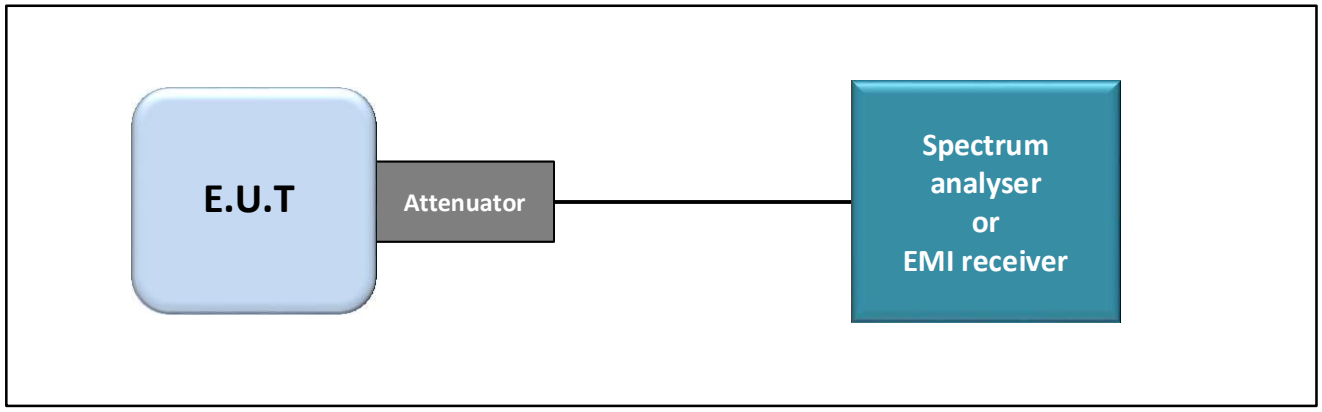
Test performed by	: Armand MAHOUNGOU
Date of test	: April 22, 2021 to April 23, 2021
Ambient temperature	: 24°C & 22°C
Relative humidity	: 46% & 47%

8.2. 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 § E2 b) (Method SA-1) & F
☐ KDB 789033 D02 General UNII Test Procedures New Rules v02r01 § E2 c) (Method SA-2) & F
☑ KDB 662911 D01 Multiple Transmitter Output v02r01



Test set up of Maximum Conducted Output Power

Photograph for Maximum Conducted Output Power

8.3. LIMIT

FCC Part 15.407
Maximum Conducted Output power:
5150MHz-5250MHz: Shall not exceed 30dBm for Indoor Access Point devices & 24dBm for Client devices
5250MHz-5350MHz: Shall not exceed 24dBm or 11dBm +10*log (-26dB Bandwidth (MHz))
5470MHz-5725MHz: Shall not exceed 24dBm or 11dBm +10*log (-26dB Bandwidth (MHz))
5725MHz-5850MHz: Shall not exceed 30dBm
Limits are reduced by G-6dBi if Overall Antenna Gain above 6dBi

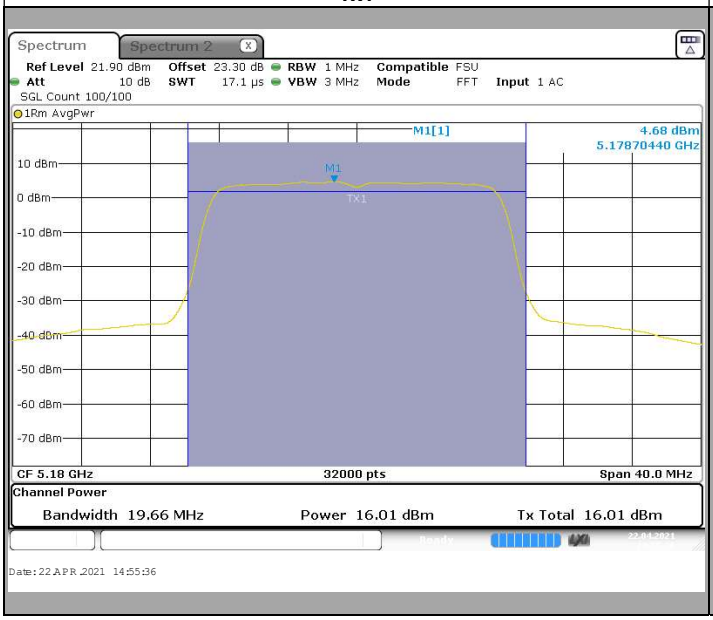
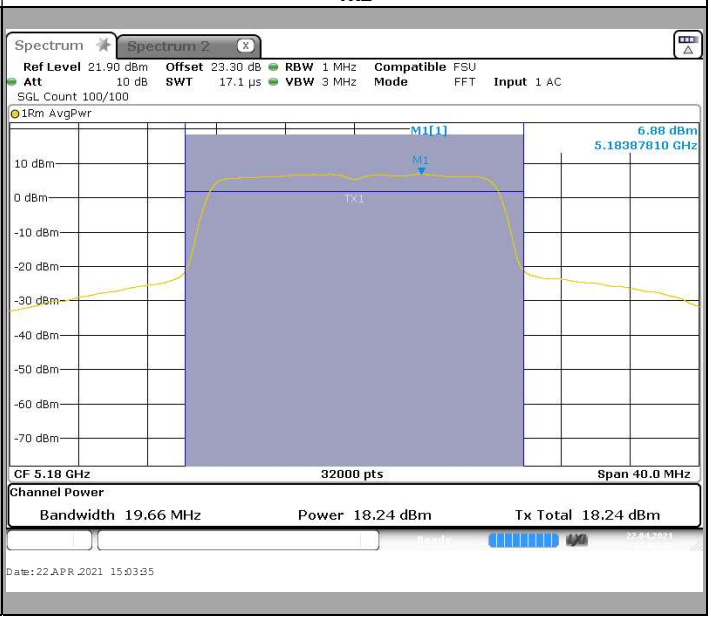
Maximum Power Spectral Density:
5150MHz-5250MHz: Shall not exceed 17dBm/MHz for Indoor Access Point & 11dBm/MHz for Client devices
5250MHz-5350MHz: Shall not exceed 11dBm/MHz
5470MHz-5725MHz: Shall not exceed 11dBm/MHz
5725MHz-5850MHz: Shall not exceed 30dBm/500kHz
Limits are reduced by G-6dBi if Overall Antenna Gain above 6dBi

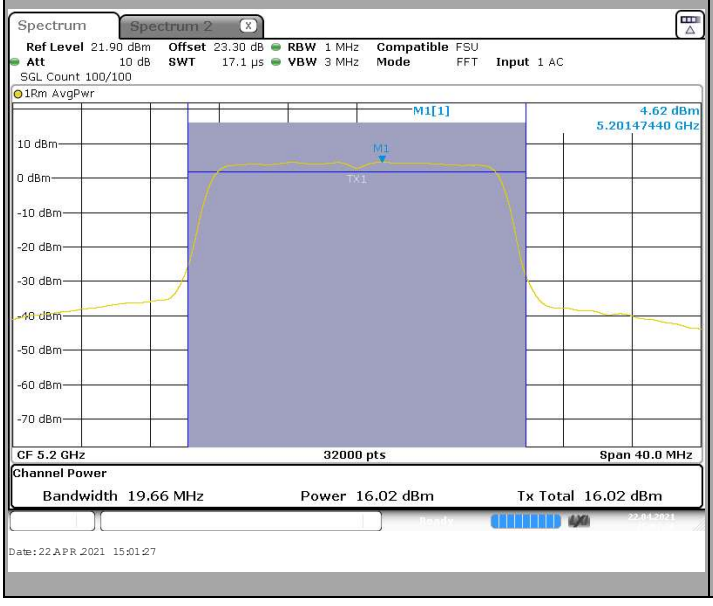
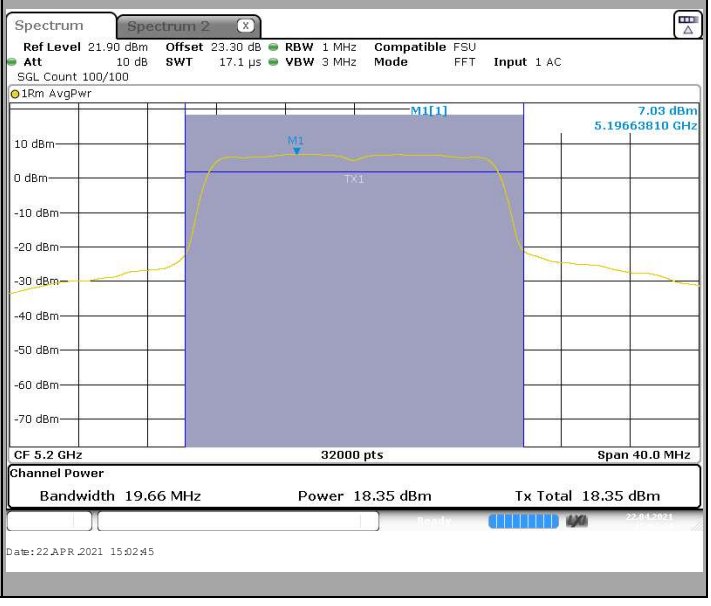
8.4. TEST EQUIPMENT LIST

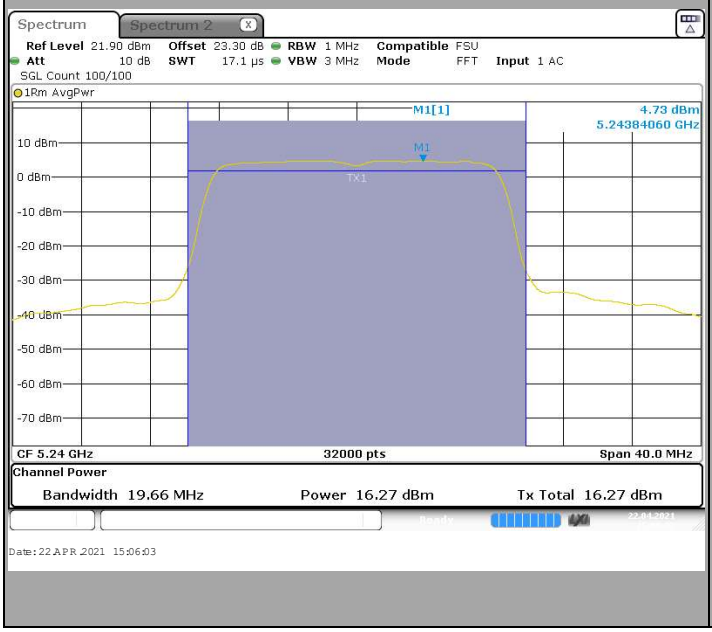
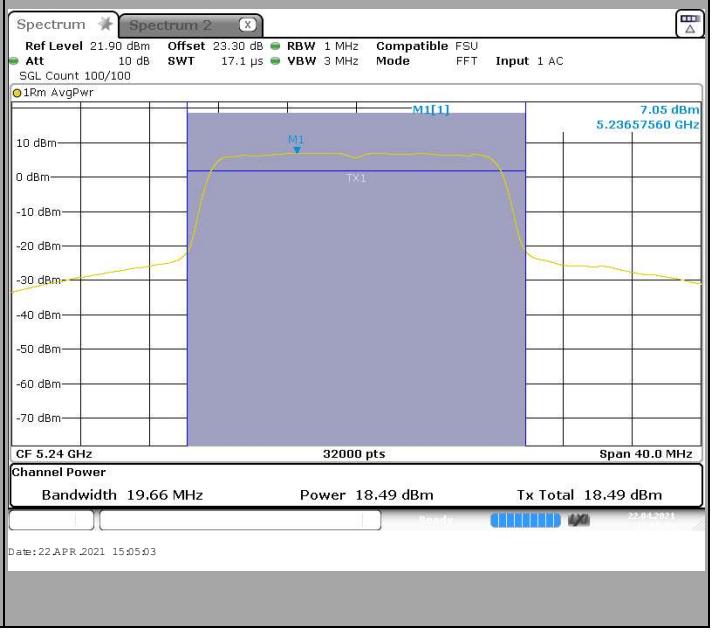
DESCRIPTION	MANUFACTURER	MODEL	N° LCIE	Cal_Date	Cal_Due
EMI receiver	ROHDE & SCHWARZ	ESR7	A2642026	2019/07	2021/07
Cable + Attenuateur 20dB	PASTERNACK	PE350-150CM	A5329973	2020/09	2021/09
Multimeter	KEITHLEY	2000	A1242090	2019/05	2021/05
Power supply	KIKUSUI	PCR500M	A7040079	See Multimeter	See Multimeter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

8.5. RESULTS

802.11a	
C1	
Tx1	Tx2
	

802.11a	
C2	
Tx1	Tx2
	

802.11a	
C3	
Tx1	Tx2
	

802.11a	
C4	
Tx1	Tx2