



FCC RF Test Report

FCC ID : UZ7ET45BB
EQUIPMENT : Tablet
BRAND NAME : Zebra
MODEL NAME : ET45BB
APPLICANT : Zebra Technologies Corporation
1 Zebra Plaza, Holtsville, NY 11742
MANUFACTURER : Zebra Technologies Corporation
1 Zebra Plaza, Holtsville, NY 11742
STANDARD : FCC Part 15 Subpart E §15.407
CLASSIFICATION : (NII) Unlicensed National Information Infrastructure
TEST DATE(S) : May 17, 2022 ~ Jul. 26, 2022

We, Sporton International Inc. (Kunshan), would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. (Kunshan), the test report shall not be reproduced except in full.

Jason Jia

Approved by: Jason Jia



Sporton International Inc. (Kunshan)

No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300
People's Republic of China



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SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit for U-NII-1 ~ U-NII-2C	Limit for U-NII-3	Result	Remark
3.1	2.1049 & 15.403(i)	26dB & 99% Bandwidth	-	> 500kHz	Report only	-
3.2	15.407(a)	Maximum Conducted Output Power	≤ 24 dBm	≤ 30 dBm	Pass	-
3.3	15.407(a)	Power Spectral Density	≤ 11 dBm	≤ 30 dBm/500kHz	Pass	-
3.4	15.407(b)	Unwanted Emissions	15.407(b) & 15.209(a)	15.407(b)(4)(i) & 15.209(a)	Pass	Under limit 1.01 dB at 2464.94 MHz
3.5	15.207	AC Conducted Emission	15.207(a)	15.207(a)	Pass	Under limit 18.44 dB at 0.182 MHz
3.6	15.203 & 15.407(a)	Antenna Requirement	15.203 & 15.407(a)	15.203 & 15.407(a)	Pass	-

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and Explanations:
The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.



1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
Equipment	Tablet
Brand Name	Zebra
Model Name	ET45BB
FCC ID	UZ7ET45BB
HW Version	EV2-2
SW Version	ET45USERDEBUG 11 11-10-12.00-RG-U00-PRD-GSE MXJ release-keys
MFD	07MAY22
EUT Stage	Identical Prototype

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

Specification of Accessory				
Battery	Brand Name	Zebra	Model Number	BT-000456

Specification of Accessory				
AC Adapter	Brand Name	Zebra	Part Number	PWR-WUA5V12W0US
Earphone 1	Brand Name	Zebra	Part Number	HDST-35MM-PTVP-01
Earphone 2	Brand Name	Zebra	Part Number	HDST-USBC-PTT1-01
USB Cable (Type C to Type A)	Brand Name	Zebra	Part Number	CBL-TC5X-USBC2A-01
Type C-Audio Cable (Type C to 3.5mm)	Brand Name	Zebra	Part Number	ADP-USBC-35MM1-01



1.2 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx/Rx Frequency Range	5180 MHz ~ 5240 MHz 5260 MHz ~ 5320 MHz 5500 MHz ~ 5720 MHz 5745 MHz ~ 5825 MHz
Maximum Output Power to Antenna	<p><MIMO Ant. 1+2></p> <p><5180 MHz ~ 5240 MHz> 802.11a : 23.15 dBm / 0.2065 W 802.11n HT20 : 22.70 dBm / 0.1862 W 802.11n HT40 : 22.81 dBm / 0.1910 W 802.11ac VHT20 : 22.62 dBm / 0.1828 W 802.11ac VHT40 : 22.76 dBm / 0.1888 W 802.11ac VHT80 : 21.61 dBm / 0.1449 W 802.11ax HE20 : 22.73 dBm / 0.1875 W 802.11ax HE40 : 22.91 dBm / 0.1954 W 802.11ax HE80 : 21.79 dBm / 0.1510 W</p> <p><5260 MHz ~ 5320 MHz> 802.11a : 21.55 dBm / 0.1429 W 802.11n HT20 : 22.40 dBm / 0.1738 W 802.11n HT40 : 22.68 dBm / 0.1854 W 802.11ac VHT20 : 22.34 dBm / 0.1714 W 802.11ac VHT40 : 22.60 dBm / 0.1820 W 802.11ac VHT80 : 20.45 dBm / 0.1109 W 802.11ax HE20 : 22.45 dBm / 0.1758 W 802.11ax HE40 : 22.75 dBm / 0.1884 W 802.11ax HE80 : 20.59 dBm / 0.1146 W</p> <p><5500 MHz ~ 5720 MHz > 802.11a : 21.98 dBm / 0.1578 W 802.11n HT20 : 22.80 dBm / 0.1905 W 802.11n HT40 : 22.83 dBm / 0.1919 W 802.11ac VHT20 : 22.73 dBm / 0.1875 W 802.11ac VHT40 : 22.77 dBm / 0.1892 W 802.11ac VHT80 : 22.63 dBm / 0.1832 W 802.11ax HE20 : 22.92 dBm / 0.1959 W 802.11ax HE40 : 22.91 dBm / 0.1954 W 802.11ax HE80 : 22.72 dBm / 0.1871 W</p> <p><5745 MHz ~ 5825 MHz> 802.11a : 24.05 dBm / 0.2541 W 802.11n HT20 : 23.98 dBm / 0.2500 W 802.11n HT40 : 22.53 dBm / 0.1791 W 802.11ac VHT20 : 24.05 dBm / 0.2541 W 802.11ac VHT40 : 22.61 dBm / 0.1824 W 802.11ac VHT80 : 22.60 dBm / 0.1820 W 802.11ax HE20 : 24.31 dBm / 0.2698 W 802.11ax HE40 : 22.82 dBm / 0.1914 W 802.11ax HE80 : 22.69 dBm / 0.1858 W</p>
99% Occupied Bandwidth	<p><5180 MHz ~ 5250 MHz> 802.11a : 17.03 MHz 802.11ax HE20 : 19.18 MHz 802.11ax HE40 : 38.28 MHz 802.11ax HE80 : 78.32 MHz</p> <p><5260 MHz ~ 5320 MHz > 802.11a : 17.78 MHz 802.11ax HE20 : 19.18 MHz</p>



	802.11ax HE40 : 38.20 MHz 802.11ax HE80 : 78.00 MHz <5500 MHz ~ 5720 MHz > 802.11a : 17.86 MHz 802.11ax HE20 : 19.18 MHz 802.11ax HE40 : 38.28 MHz 802.11ax HE80 : 78.48 MHz <5745 MHz ~ 5825 MHz> 802.11a : 18.02 MHz 802.11ax HE20 : 19.30 MHz 802.11ax HE40 : 38.04 MHz 802.11ax HE80 : 78.16 MHz		
Antenna Type / Gain	<5180 MHz ~ 5240 MHz> <Ant. 1> : PIFA Antenna with gain 1.8 dBi <Ant. 2> : PIFA Antenna with gain 1.4 dBi Beamforming Gain : 4.61 dB <5260 MHz ~ 5320 MHz> <Ant. 1> : PIFA Antenna with gain 2.3 dBi <Ant. 2> : PIFA Antenna with gain 1.4 dBi Beamforming Gain : 4.87 dB <5500 MHz ~ 5700 MHz> <Ant. 1> : PIFA Antenna with gain 2.1 dBi <Ant. 2> : PIFA Antenna with gain -0.1 dBi Beamforming Gain : 4.08 dB <5745 MHz ~ 5825 MHz> <Ant. 1> : PIFA Antenna with gain 1.8 dBi <Ant. 2> : PIFA Antenna with gain -0.9 dBi Beamforming Gain : 3.56 dB		
Type of Modulation	802.11a/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11ac/ax : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM / 1024QAM)		
Antenna Function Description		Ant. 1	Ant. 2
	802.11 a/n/ac/ax SISO	V	V
	802.11 a/n/ac/ax MIMO	V	V
	802.11 n/ax Tx BF	V	V

Note:

- For 802.11n/ac/ax 20/40/80MHz mode, the whole testing has assessed only 802.11ax HE20/HE40/HE80MHz by referring to the higher output power.
- 802.11ax support OFDMA full RU tone and partial RU tone, both full RU and partial RU-left (for low CH) and partial RU-right (for high CH) test Power/PSD/RSE, the full RU power > partial RU, therefore the full RU perform full test and Partial RU verified power/PSD/RSE.
- WIFI MIMO only support CDD by manufacturer declared.
- WLAN 5G Ant. 1 / Ant. 2 corresponding to EUT Photo Ant. 6 / Ant. 7.



1.3 Modification of EUT

No modifications are made to the EUT during all test items.

1.4 Testing Location

Sporton International Inc. (Kunshan) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

Test Firm	Sporton International Inc. (Kunshan)		
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158 FAX : +86-512-57900958		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	CO01-KS 03CH07-KS TH01-KS	CN1257	314309

1.5 Test Software

Item	Site	Manufacturer	Name	Version
1.	03CH07-KS	AUDIX	E3	6.2009-8-24al
2.	CO01-KS	AUDIX	E3	6.2009-8-24

1.6 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ 47 CFR Part 15 Subpart E
- ♦ FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
- ♦ FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
- ♦ ANSI C63.10-2013

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.



2 Test Configuration of Equipment Under Test

- a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conduction emission (150 kHz to 30 MHz), radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (Z plane) were recorded in this report.
- b. AC power line Conducted Emission was tested under maximum output power.

2.1 Carrier Frequency and Channel

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5180-5240 MHz U-NII-1	36	5180	44	5220
	38*	5190	46*	5230
	40	5200	48	5240
	42 [#]	5210		

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5260-5320 MHz U-NII-2A	52	5260	60	5300
	54*	5270	62*	5310
	56	5280	64	5320
	58 [#]	5290		

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5500- 5720 MHz U-NII-2C	100	5500	112	5560
	102*	5510	116	5580
	104	5520	132	5660
	106 [#]	5530	134*	5670
	108	5540	136	5680
	110*	5550	140	5700

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5745-5825 MHz U-NII-3	149	5745	157	5785
	151*	5755	159*	5795
	153	5765	161	5805
	155 [#]	5775	165	5825



Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
TDWR Channel	118*	5590	124	5620
	120	5600	126*	5630
	122 [#]	5610	128	5640

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
Straddle Channel	138 [#]	5690	144	5720
	142*	5710		

Note:

1. The above Frequency and Channel in "*" were 802.11n HT40 and 802.11ac VHT40 and 802.11ax HE40.
2. The above Frequency and Channel in "[#]" were 802.11ac VHT80 and 802.11ax HE80.

2.2 Test Mode

Final test modes are considering the modulation and worse data rates as below table.

MIMO Mode

Modulation	Data Rate
802.11a	6 Mbps
802.11ax HE20	MCS0
802.11ax HE40	MCS0
802.11ax HE80	MCS0

Test Cases	
AC Conducted Emission	Mode 1 : LTE Band 5 Idle + Bluetooth Link + WLAN Link(5G) + Battery(BT-000456) + USB Cable(CBL-TC5X-USBC2A-01) + Charging from AC Adapter (PWR-WUA5V12W0US)
Remark: 1. RSE Co-location mode is combination from the worst BT/WLAN TX mode and WWAN Link mode. 2. For Radiated Test Cases, the tests were performed with Adapter and USB Cable.	



Ch. #		U-NII-1 : 5180-5240 MHz		U-NII-2A : 5260-5320 MHz		U-NII-2C : 5500- 5720 MHz	
		802.11a		802.11a		802.11a	
L	Low	36		52		100	
M	Middle	44		60		116	
H	High	48		64		140	
Straddle		-		-		144	

Ch. #		U-NII-1 : 5180-5240 MHz		U-NII-2A : 5260-5320 MHz		U-NII-2C : 5500- 5720 MHz	
		802.11ax HE20		802.11ax HE20		802.11ax HE20	
L	Low	36		52		100	
M	Middle	44		60		116	
H	High	48		64		140	
Straddle		-		-		144	

Ch. #		U-NII-1 : 5180-5240 MHz		U-NII-2A : 5260-5320 MHz		U-NII-2C : 5500- 5720 MHz	
		802.11ax HE40		802.11ax HE40		802.11ax HE40	
L	Low	38		54		102	
M	Middle	-		-		110	
H	High	46		62		134	
Straddle		-		-		142	

Ch. #		U-NII-1 : 5180-5240 MHz		U-NII-2A : 5260-5320 MHz		U-NII-2C : 5500- 5720 MHz	
		802.11ax HE80		802.11ax HE80		802.11ax HE80	
L	Low	-		-		106	
M	Middle	42		58		-	
H	High	-		-		122	
Straddle		-		-		138	

Ch. #		U-NII-3 : 5745-5825 MHz			
		802.11a	802.11ax HE20	802.11ax HE40	802.11ax HE80
L	Low	149	149	151	-
M	Middle	157	157	-	155
H	High	165	165	159	-

Remark: For radiation spurious emission, the final modulation and the worst data rate was reference the max RF conducted power.



<802.11a>

Channel	Frequency(MHz)	ANT	Data Rate							
			6Mbps	9Mbps	12Mbps	18Mbps	24Mbps	36Mbps	48Mbps	54Mbps
CH 036	5180 MHz	1+2	23.15	22.89	22.88	22.70	22.83	22.74	22.82	22.78
CH 044	5220 MHz	1+2	22.77	-	-	-	-	-	-	-
CH 048	5240 MHz	1+2	22.06	-	-	-	-	-	-	-
CH 052	5260 MHz	1+2	21.53	-	-	-	-	-	-	-
CH 060	5300 MHz	1+2	21.55	21.32	21.33	21.32	21.30	21.27	21.38	21.36
CH 064	5320 MHz	1+2	21.51	-	-	-	-	-	-	-
CH 100	5500 MHz	1+2	21.98	21.73	21.66	21.82	21.77	21.80	21.90	21.71
CH 116	5580 MHz	1+2	21.49	-	-	-	-	-	-	-
CH 140	5700 MHz	1+2	21.73	-	-	-	-	-	-	-
CH 144	5720 MHz	1+2	21.69	-	-	-	-	-	-	-
CH 149	5745 MHz	1+2	22.87	-	-	-	-	-	-	-
CH 157	5785 MHz	1+2	22.89	-	-	-	-	-	-	-
CH 165	5825 MHz	1+2	24.05	23.81	23.56	23.54	23.32	23.25	23.21	22.98

<802.11n HT20>

Channel	Frequency(MHz)	ANT	Data Rate							
			MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7
CH 036	5180 MHz	1+2	22.70	22.62	22.56	22.61	22.63	22.60	22.53	22.46
CH 044	5220 MHz	1+2	22.16	-	-	-	-	-	-	-
CH 048	5240 MHz	1+2	21.71	-	-	-	-	-	-	-
CH 052	5260 MHz	1+2	22.30	-	-	-	-	-	-	-
CH 060	5300 MHz	1+2	21.86	-	-	-	-	-	-	-
CH 064	5320 MHz	1+2	22.40	22.22	22.20	22.17	22.19	22.22	22.10	22.07
CH 100	5500 MHz	1+2	22.80	22.68	22.68	22.66	22.66	22.60	22.52	22.45
CH 116	5580 MHz	1+2	21.91	-	-	-	-	-	-	-
CH 140	5700 MHz	1+2	22.00	-	-	-	-	-	-	-
CH 144	5720 MHz	1+2	22.09	-	-	-	-	-	-	-
CH 149	5745 MHz	1+2	22.82	-	-	-	-	-	-	-
CH 157	5785 MHz	1+2	22.87	-	-	-	-	-	-	-
CH 165	5825 MHz	1+2	23.98	23.68	23.65	23.64	23.84	23.91	23.86	23.80



<802.11n HT40>

Channel	Frequency (MHz)	ANT	Data Rate							
			MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7
CH 038	5190 MHz	1+2	22.69	-	-	-	-	-	-	-
CH 046	5230 MHz	1+2	22.81	22.71	22.71	22.64	22.71	22.72	22.64	22.52
CH 054	5270 MHz	1+2	22.68	22.63	22.62	22.62	22.61	22.63	22.54	22.41
CH 062	5310 MHz	1+2	20.79	-	-	-	-	-	-	-
CH 102	5510 MHz	1+2	21.11	-	-	-	-	-	-	-
CH 110	5550 MHz	1+2	22.75	-	-	-	-	-	-	-
CH 134	5670 MHz	1+2	22.83	-	-	-	-	-	-	-
CH 142	5710 MHz	1+2	22.83	22.73	22.71	22.72	22.71	22.68	22.63	22.59
CH 151	5755 MHz	1+2	22.53	22.47	22.43	22.40	22.50	22.46	22.44	22.37
CH 159	5795 MHz	1+2	22.50	-	-	-	-	-	-	-

<802.11ac VHT20>

Channel	Frequency (MHz)	ANT	Data Rate								
			MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7	MCS8
CH 036	5180 MHz	1+2	22.62	22.56	22.54	22.51	22.53	22.56	22.52	22.54	22.51
CH 044	5220 MHz	1+2	22.11	-	-	-	-	-	-	-	-
CH 048	5240 MHz	1+2	21.67	-	-	-	-	-	-	-	-
CH 052	5260 MHz	1+2	22.25	-	-	-	-	-	-	-	-
CH 060	5300 MHz	1+2	21.81	-	-	-	-	-	-	-	-
CH 064	5320 MHz	1+2	22.34	22.30	22.32	22.28	22.31	22.22	22.18	22.06	22.03
CH 100	5500 MHz	1+2	22.73	22.51	22.52	22.46	22.46	22.50	22.42	22.33	22.36
CH 116	5580 MHz	1+2	21.86	-	-	-	-	-	-	-	-
CH 140	5700 MHz	1+2	21.97	-	-	-	-	-	-	-	-
CH 144	5720 MHz	1+2	22.00	-	-	-	-	-	-	-	-
CH 149	5745 MHz	1+2	22.90	-	-	-	-	-	-	-	-
CH 157	5785 MHz	1+2	22.93	-	-	-	-	-	-	-	-
CH 165	5825 MHz	1+2	24.05	23.73	23.63	23.57	23.68	23.63	23.48	23.49	23.52



<802.11ac VHT40>

Channel	Frequency (MHz)	ANT	Data Rate										
			MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7	MCS 8	MCS 9	
CH 038	5190 MHz	1+2	22.72	-	-	-	-	-	-	-	-	-	-
CH 046	5230 MHz	1+2	22.76	22.69	22.74	22.74	22.73	22.65	22.53	22.46	22.40	22.41	
CH 054	5270 MHz	1+2	22.60	22.57	22.52	22.52	22.54	22.53	22.42	22.31	22.23	22.29	
CH 062	5310 MHz	1+2	20.83	-	-	-	-	-	-	-	-	-	-
CH 102	5510 MHz	1+2	21.17	-	-	-	-	-	-	-	-	-	-
CH 110	5550 MHz	1+2	22.69	-	-	-	-	-	-	-	-	-	-
CH 134	5670 MHz	1+2	22.77	22.72	22.66	22.61	22.68	22.70	22.60	22.58	22.57	22.59	
CH 142	5710 MHz	1+2	22.74	-	-	-	-	-	-	-	-	-	-
CH 151	5755 MHz	1+2	22.61	22.56	22.57	22.47	22.24	22.56	22.51	22.29	22.14	22.07	
CH 159	5795 MHz	1+2	22.60	-	-	-	-	-	-	-	-	-	-

<802.11ac VHT80>

Channel	Frequency (MHz)	ANT	Data Rate										
			MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7	MCS 8	MCS 9	
CH 042	5210 MHz	1+2	21.61	21.53	21.51	21.45	21.50	21.51	21.53	21.52	21.55	21.56	
CH 058	5290 MHz	1+2	20.45	20.26	20.23	20.07	20.23	20.30	20.23	20.20	20.24	20.18	
CH 106	5530 MHz	1+2	20.04	-	-	-	-	-	-	-	-	-	-
CH 122	5610 MHz	1+2	22.62	-	-	-	-	-	-	-	-	-	-
CH 138	5690 MHz	1+2	22.63	22.60	22.58	22.61	22.62	22.61	22.50	22.48	22.57	22.58	
CH 155	5775 MHz	1+2	22.60	22.52	22.53	22.50	22.51	22.55	22.46	22.46	22.46	22.32	

<802.11ax HE20>

Channel	Frequency (MHz)	ANT	Data Rate											
			MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7	MCS 8	MCS 9	MCS 10	MCS 11
CH 036	5180 MHz	1+2	22.73	22.65	22.69	22.68	22.57	22.68	22.59	22.66	22.55	22.50	22.54	22.57
CH 044	5220 MHz	1+2	22.23	-	-	-	-	-	-	-	-	-	-	-
CH 048	5240 MHz	1+2	21.76	-	-	-	-	-	-	-	-	-	-	-
CH 052	5260 MHz	1+2	22.41	-	-	-	-	-	-	-	-	-	-	-
CH 060	5300 MHz	1+2	21.95	-	-	-	-	-	-	-	-	-	-	-
CH 064	5320 MHz	1+2	22.45	22.40	22.32	22.31	22.35	22.24	22.26	22.25	22.23	22.16	22.18	22.28
CH 100	5500 MHz	1+2	22.92	22.64	22.67	22.64	22.57	22.61	22.62	22.57	22.62	22.57	22.50	22.54
CH 116	5580 MHz	1+2	21.97	-	-	-	-	-	-	-	-	-	-	-
CH 140	5700 MHz	1+2	22.08	-	-	-	-	-	-	-	-	-	-	-
CH 144	5720 MHz	1+2	22.10	-	-	-	-	-	-	-	-	-	-	-
CH149	5745 MHz	1+2	23.05	-	-	-	-	-	-	-	-	-	-	-
CH 157	5785 MHz	1+2	23.12	-	-	-	-	-	-	-	-	-	-	-
CH 165	5825 MHz	1+2	24.31	24.12	23.94	23.91	23.87	23.89	23.91	23.78	23.75	23.64	23.65	23.71



<802.11ax HE40>

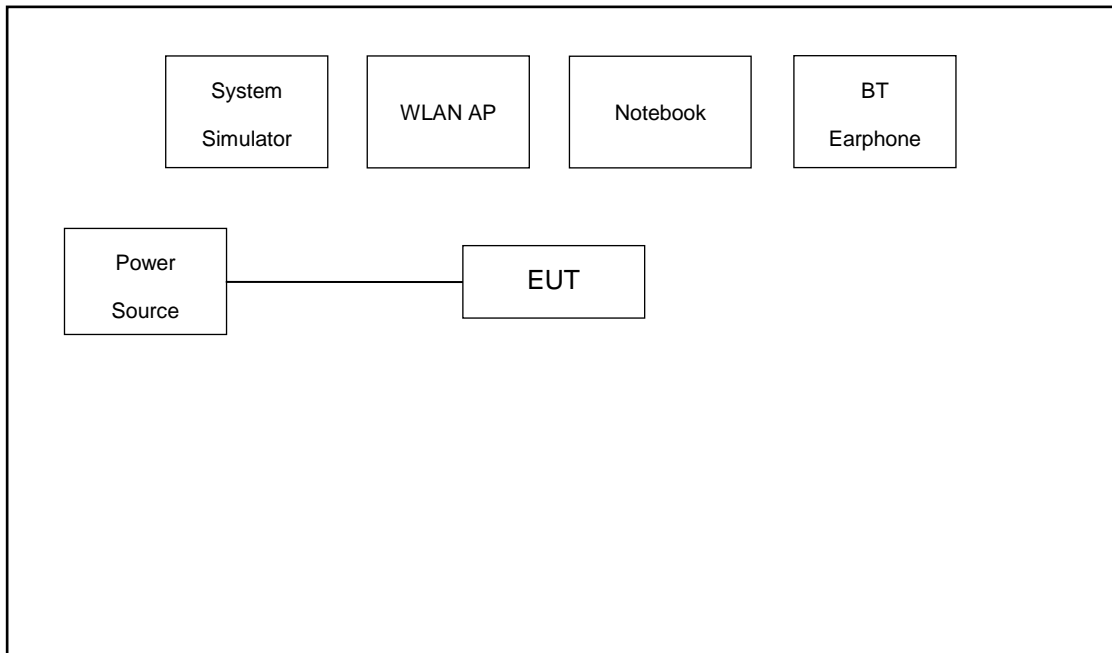
Channel	Frequency (MHz)	ANT	Data Rate											
			MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7	MCS8	MCS 9	MCS 10	MCS 11
CH 038	5190 MHz	1+2	22.77	-	-	-	-	-	-	-	-	-	-	-
CH 046	5230 MHz	1+2	22.91	22.88	22.85	22.81	22.73	22.67	22.77	22.70	22.72	22.77	22.74	22.73
CH 054	5270 MHz	1+2	22.75	22.57	22.50	22.56	22.43	22.39	22.52	22.39	22.48	22.45	22.57	22.45
CH 062	5310 MHz	1+2	20.87	-	-	-	-	-	-	-	-	-	-	-
CH 102	5510 MHz	1+2	21.19	-	-	-	-	-	-	-	-	-	-	-
CH 110	5550 MHz	1+2	22.89	-	-	-	-	-	-	-	-	-	-	-
CH 134	5670 MHz	1+2	22.89	-	-	-	-	-	-	-	-	-	-	-
CH 142	5710 MHz	1+2	22.91	22.84	22.65	22.58	22.75	22.73	22.77	22.73	22.64	22.63	22.70	22.70
CH 151	5755 MHz	1+2	22.79	-	-	-	-	-	-	-	-	-	-	-
CH 159	5795 MHz	1+2	22.82	22.57	22.48	22.57	22.43	22.41	22.50	22.35	22.47	22.43	22.46	22.44

<802.11ax HE80>

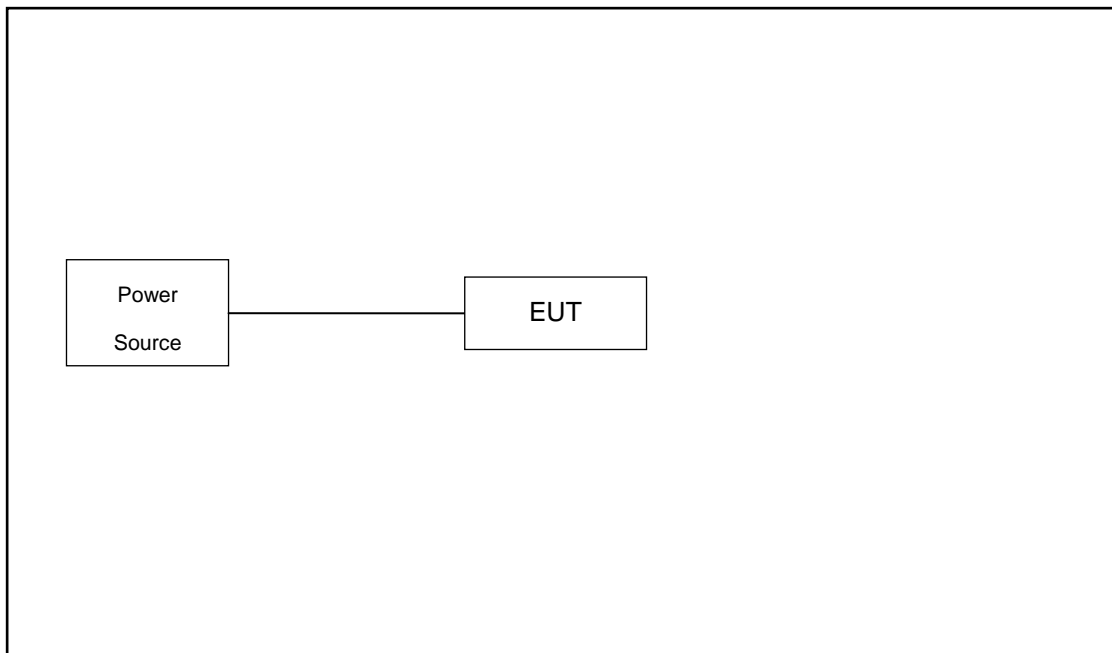
Channel	Frequency (MHz)	ANT	Data Rate											
			MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7	MCS8	MCS 9	MCS 10	MCS 11
CH 042	5210 MHz	1+2	21.79	21.73	21.66	21.61	21.61	21.60	21.59	21.56	21.59	21.52	21.50	21.45
CH 058	5290 MHz	1+2	20.59	20.52	20.51	20.46	20.48	20.54	20.49	20.48	20.46	20.37	20.34	20.26
CH 106	5530 MHz	1+2	20.10	-	-	-	-	-	-	-	-	-	-	-
CH 122	5610 MHz	1+2	22.72	22.66	22.62	22.64	22.68	22.65	22.53	22.57	22.50	22.34	22.30	22.18
CH 138	5690 MHz	1+2	22.70	-	-	-	-	-	-	-	-	-	-	-
CH 155	5775 MHz	1+2	22.69	22.58	22.62	22.66	22.61	21.98	22.46	22.28	22.18	22.23	22.32	22.26

2.3 Connection Diagram of Test System

For Conducted Emission:



For Radiated Emission:





2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Base Station	Anritsu	MT8821C	N/A	N/A	Unshielded, 1.8m
2.	WLAN AP	D-link	DIR-655	KA21R655B1	N/A	Unshielded, 1.8m
3.	Notebook	Lenovo	V130-15IKB005	N/A	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
4.	Bluetooth Earphone	Lenovo	LBH308	N/A	N/A	N/A

2.5 EUT Operation Test Setup

For WLAN RF test items, an engineering test program was provided and enabled to make EUT continuously transmit/receive.

For AC power line conducted emissions, the EUT was set to connect with the WLAN AP under large package sizes transmission.

2.6 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

Example :

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

$$\text{Offset} = \text{RF cable loss} + \text{attenuator factor}.$$

Following shows an offset computation example with cable loss 7.0 dB and 10dB attenuator.

$$\begin{aligned} \text{Offset}(dB) &= \text{RF cable loss}(dB) + \text{attenuator factor}(dB). \\ &= 7.0 + 10 = 17.0 \text{ (dB)} \end{aligned}$$



3 Test Result

3.1 6dB and 26dB and 99% Occupied Bandwidth Measurement

3.1.1 Description of 6dB and 26dB and 99% Occupied Bandwidth

The minimum 6 dB bandwidth shall be at least 500 kHz.
26dB and 99% Occupied bandwidth are reporting only.

For Straddle Channel, According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, If the power and PSD of the devices are uniform and comply with the lower limits specified for the U-NII-2 bands, a single measurement over the entire emission bandwidth can be performed to show compliance.

3.1.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

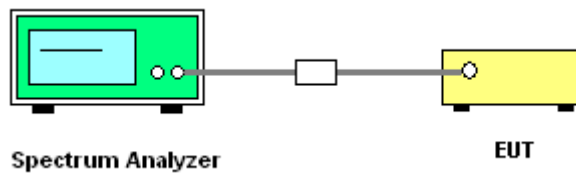
3.1.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

<input checked="" type="checkbox"/>	Section C) Bandwidth Measurement 1. Emission Bandwidth (EBW)
	<ol style="list-style-type: none"> 1. Set RBW = approximately 1% of the emission bandwidth. 2. Set the VBW > RBW. 3. Detector = Peak. 4. Trace mode = max hold 5. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%, Set the VBW > RBW. 6. For 6dB BW, Set RBW = 100kHz, Set the VBW ≥ 3 x RBW. 7. For 99% Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) is set 1%~5% of OBW and set the Video bandwidth (VBW) ≥ 3 * RBW. 8. Measure and record the results in the test report.

☒	<p>Section C) Bandwidth Measurement</p> <p>2. Minimum Emission Bandwidth for the band 5.725 - 5.85 GHz</p>
	<ol style="list-style-type: none"> 1. Set RBW = 100kHz. 2. Set the VBW $\geq 3 \times$ RBW. 3. Detector = Peak. 4. Trace mode = max hold 5. Measure the maximum width of the emission that is 6 dB down from the peak of the emission. 6. Measure and record the results in the test report.

3.1.4 Test Setup





3.1.5 Test Result of 6dB & 26dB & 99% Occupied Bandwidth

Test Engineer: Jacob Zhang	Temperature:	21~25°C
	Relative Humidity:	51~54%

<26dB EBW>

Test Mode	Antenna	Frequency[MHz]	26dB EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A-CDD	Ant1	5180	21.33	5169.31	5190.64	---	---
	Ant2	5180	21.13	5169.46	5190.59	---	---
	Ant1	5220	21.33	5209.41	5230.74	---	---
	Ant2	5220	21.23	5209.36	5230.59	---	---
	Ant1	5240	21.48	5229.26	5250.74	---	---
	Ant2	5240	21.38	5229.26	5250.64	---	---
	Ant1	5260	21.20	5249.32	5270.52	---	---
	Ant2	5260	21.76	5248.88	5270.64	---	---
	Ant1	5300	21.08	5289.48	5310.56	---	---
	Ant2	5300	21.60	5289.12	5310.72	---	---
	Ant1	5320	20.96	5309.52	5330.48	---	---
	Ant2	5320	21.32	5309.28	5330.60	---	---
	Ant1	5500	21.12	5489.44	5510.56	---	---
	Ant2	5500	21.60	5489.12	5510.72	---	---
	Ant1	5580	21.24	5569.40	5590.64	---	---
	Ant2	5580	22.16	5568.72	5590.88	---	---
	Ant1	5700	21.24	5689.52	5710.76	---	---
	Ant2	5700	21.56	5689.12	5710.68	---	---
	Ant1	5720	21.00	5709.56	5730.56	---	---
	Ant2	5720	21.40	5709.24	5730.64	---	---
	Ant1	5745	21.28	5734.28	5755.56	---	---
	Ant2	5745	26.80	5732.04	5758.84	---	---
	Ant1	5785	21.08	5774.36	5795.44	---	---
	Ant2	5785	25.28	5772.88	5798.16	---	---
Ant1	5825	22.48	5813.76	5836.24	---	---	
Ant2	5825	23.88	5813.08	5836.96	---	---	
11AX20MIMO	Ant1	5180	21.24	5169.40	5190.64	---	---
	Ant2	5180	21.12	5169.60	5190.72	---	---
	Ant1	5220	21.20	5209.32	5230.52	---	---
	Ant2	5220	21.68	5209.20	5230.88	---	---
	Ant1	5240	21.20	5229.36	5250.56	---	---
	Ant2	5240	22.40	5229.28	5251.68	---	---
	Ant1	5260	21.12	5249.40	5270.52	---	---
	Ant2	5260	21.04	5249.52	5270.56	---	---
	Ant1	5300	21.12	5289.36	5310.48	---	---
	Ant2	5300	21.20	5289.36	5310.56	---	---
	Ant1	5320	21.20	5309.44	5330.64	---	---
	Ant2	5320	21.44	5309.16	5330.60	---	---
	Ant1	5500	21.16	5489.48	5510.64	---	---
	Ant2	5500	21.68	5489.08	5510.76	---	---
	Ant1	5580	21.28	5569.28	5590.56	---	---
	Ant2	5580	21.80	5569.20	5591.00	---	---



	Ant1	5700	21.32	5689.44	5710.76	---	---
	Ant2	5700	21.28	5689.48	5710.76	---	---
	Ant1	5720	20.96	5709.52	5730.48	---	---
	Ant2	5720	21.28	5709.44	5730.72	---	---
	Ant1	5745	21.64	5734.04	5755.68	---	---
	Ant2	5745	22.52	5733.44	5755.96	---	---
	Ant1	5785	22.48	5774.52	5797.00	---	---
	Ant2	5785	25.28	5773.48	5798.76	---	---
	Ant1	5825	22.32	5813.56	5835.88	---	---
	Ant2	5825	24.84	5813.72	5838.56	---	---
11AX40MIMO	Ant1	5190	47.44	5165.92	5213.36	---	---
	Ant2	5190	53.28	5165.92	5219.20	---	---
	Ant1	5230	53.20	5205.92	5259.12	---	---
	Ant2	5230	72.48	5197.12	5269.60	---	---
	Ant1	5270	58.40	5242.00	5300.40	---	---
	Ant2	5270	57.92	5241.68	5299.60	---	---
	Ant1	5310	53.12	5285.84	5338.96	---	---
	Ant2	5310	61.44	5278.72	5340.16	---	---
	Ant1	5510	55.12	5485.84	5540.96	---	---
	Ant2	5510	61.84	5478.64	5540.48	---	---
	Ant1	5550	49.92	5526.72	5576.64	---	---
	Ant2	5550	70.08	5518.48	5588.56	---	---
	Ant1	5670	55.36	5643.92	5699.28	---	---
	Ant2	5670	70.24	5638.00	5708.24	---	---
	Ant1	5710	61.44	5679.20	5740.64	---	---
	Ant2	5710	63.84	5678.64	5742.48	---	---
	Ant1	5755	47.20	5731.56	5778.76	---	---
	Ant2	5755	52.88	5726.60	5779.48	---	---
	Ant1	5795	45.04	5774.36	5819.40	---	---
	Ant2	5795	54.24	5768.12	5822.36	---	---
11AX80MIMO	Ant1	5210	82.24	5169.04	5251.28	---	---
	Ant2	5210	107.68	5163.44	5271.12	---	---
	Ant1	5290	94.88	5247.28	5342.16	---	---
	Ant2	5290	105.44	5246.96	5352.40	---	---
	Ant1	5530	102.88	5483.12	5586.00	---	---
	Ant2	5530	119.36	5469.52	5588.88	---	---
	Ant1	5610	97.76	5568.88	5666.64	---	---
	Ant2	5610	130.56	5543.92	5674.48	---	---
	Ant1	5690	105.76	5645.36	5751.12	---	---
	Ant2	5690	132.00	5625.68	5757.68	---	---
	Ant1	5775	86.72	5729.40	5816.12	---	---
	Ant2	5775	87.84	5729.72	5817.56	---	---



Tx Beamforming mode							
Test Mode	Antenna	Frequency[MHz]	26dB EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11AX20MIMO	Ant1	5180	21.00	5169.60	5190.60	---	---
	Ant2	5180	21.00	5169.48	5190.48	---	---
	Ant1	5220	21.16	5209.44	5230.60	---	---
	Ant2	5220	21.12	5209.52	5230.64	---	---
	Ant1	5240	21.12	5229.44	5250.56	---	---
	Ant2	5240	21.00	5229.52	5250.52	---	---
	Ant1	5260	21.16	5249.40	5270.56	---	---
	Ant2	5260	20.64	5249.64	5270.28	---	---
	Ant1	5300	21.12	5289.48	5310.60	---	---
	Ant2	5300	20.88	5289.52	5310.40	---	---
	Ant1	5320	21.08	5309.52	5330.60	---	---
	Ant2	5320	21.20	5309.44	5330.64	---	---
	Ant1	5500	21.00	5489.68	5510.68	---	---
	Ant2	5500	20.84	5489.56	5510.40	---	---
	Ant1	5580	21.24	5569.40	5590.64	---	---
	Ant2	5580	21.12	5569.48	5590.60	---	---
	Ant1	5700	20.76	5689.68	5710.44	---	---
	Ant2	5700	21.00	5689.52	5710.52	---	---
	Ant1	5720	20.88	5709.64	5730.52	---	---
	Ant2	5720	20.72	5709.60	5730.32	---	---
	Ant1	5745	24.00	5732.48	5756.48	---	---
	Ant2	5745	32.32	5729.52	5761.84	---	---
	Ant1	5785	29.52	5771.36	5800.88	---	---
	Ant2	5785	27.72	5771.20	5798.92	---	---
Ant1	5825	27.00	5810.76	5837.76	---	---	
Ant2	5825	32.96	5807.52	5840.48	---	---	
11AX40MIMO	Ant1	5190	44.56	5169.84	5214.40	---	---
	Ant2	5190	51.28	5165.44	5216.72	---	---
	Ant1	5230	50.32	5205.44	5255.76	---	---
	Ant2	5230	58.16	5198.64	5256.80	---	---
	Ant1	5270	62.48	5238.16	5300.64	---	---
	Ant2	5270	54.24	5241.20	5295.44	---	---
	Ant1	5310	47.92	5286.16	5334.08	---	---
	Ant2	5310	63.20	5278.80	5342.00	---	---
	Ant1	5510	61.92	5478.88	5540.80	---	---
	Ant2	5510	62.08	5481.92	5544.00	---	---
	Ant1	5550	43.04	5529.92	5572.96	---	---
	Ant2	5550	64.16	5520.48	5584.64	---	---
	Ant1	5670	52.24	5644.08	5696.32	---	---
	Ant2	5670	69.60	5637.04	5706.64	---	---
	Ant1	5710	59.84	5678.72	5738.56	---	---
	Ant2	5710	61.36	5678.80	5740.16	---	---
	Ant1	5755	76.56	5717.40	5793.96	---	---
	Ant2	5755	78.40	5715.48	5793.88	---	---
Ant1	5795	68.80	5759.48	5828.28	---	---	
Ant2	5795	79.60	5755.32	5834.92	---	---	



11AX80MIMO	Ant1	5210	81.76	5169.36	5251.12	---	---
	Ant2	5210	95.52	5155.76	5251.28	---	---
	Ant1	5290	82.24	5249.04	5331.28	---	---
	Ant2	5290	88.64	5249.04	5337.68	---	---
	Ant1	5530	91.20	5487.92	5579.12	---	---
	Ant2	5530	109.44	5470.96	5580.40	---	---
	Ant1	5610	81.92	5569.36	5651.28	---	---
	Ant2	5610	137.76	5540.08	5677.84	---	---
	Ant1	5690	99.52	5637.36	5736.88	---	---
	Ant2	5690	114.88	5633.52	5748.40	---	---
	Ant1	5775	137.44	5710.36	5847.80	---	---
	Ant2	5775	144.00	5702.04	5846.04	---	---



<Occupied channel bandwidth>

Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A-CDD	Ant1	5180	16.933	5171.509	5188.442	---	---
	Ant2	5180	16.833	5171.608	5188.442	---	---
	Ant1	5220	16.933	5211.509	5228.442	---	---
	Ant2	5220	16.933	5211.558	5228.492	---	---
	Ant1	5240	17.033	5231.459	5248.492	---	---
	Ant2	5240	16.933	5231.558	5248.492	---	---
	Ant1	5260	17.782	5251.049	5268.831	---	---
	Ant2	5260	17.383	5251.289	5268.671	---	---
	Ant1	5300	17.782	5291.089	5308.871	---	---
	Ant2	5300	17.343	5291.369	5308.711	---	---
	Ant1	5320	17.782	5311.089	5328.871	---	---
	Ant2	5320	17.383	5311.289	5328.671	---	---
	Ant1	5500	17.822	5491.049	5508.871	---	---
	Ant2	5500	17.463	5491.289	5508.751	---	---
	Ant1	5580	17.862	5571.049	5588.911	---	---
	Ant2	5580	17.582	5571.249	5588.831	---	---
	Ant1	5700	17.862	5691.049	5708.911	---	---
	Ant2	5700	17.542	5691.289	5708.831	---	---
	Ant1	5720	17.822	5711.089	5728.911	---	---
	Ant2	5720	17.463	5711.289	5728.751	---	---
	Ant1	5745	18.022	5735.969	5753.991	---	---
	Ant2	5745	17.822	5736.129	5753.951	---	---
	Ant1	5785	17.982	5775.969	5793.951	---	---
	Ant2	5785	17.742	5776.129	5793.871	---	---
Ant1	5825	17.982	5815.929	5833.911	---	---	
Ant2	5825	17.702	5816.089	5833.791	---	---	
11AX20MIMO	Ant1	5180	19.141	5170.410	5189.550	---	---
	Ant2	5180	19.141	5170.450	5189.590	---	---
	Ant1	5220	19.181	5210.370	5229.550	---	---
	Ant2	5220	19.181	5210.410	5229.590	---	---
	Ant1	5240	19.101	5230.450	5249.550	---	---
	Ant2	5240	19.101	5230.490	5249.590	---	---
	Ant1	5260	19.141	5250.370	5269.510	---	---
	Ant2	5260	19.181	5250.370	5269.550	---	---
	Ant1	5300	19.061	5290.450	5309.510	---	---
	Ant2	5300	19.101	5290.450	5309.550	---	---
	Ant1	5320	19.101	5310.450	5329.550	---	---
	Ant2	5320	19.181	5310.410	5329.590	---	---
	Ant1	5500	19.141	5490.410	5509.550	---	---
	Ant2	5500	19.181	5490.410	5509.590	---	---
	Ant1	5580	19.101	5570.450	5589.550	---	---
	Ant2	5580	19.181	5570.410	5589.590	---	---
	Ant1	5700	19.101	5690.450	5709.550	---	---
	Ant2	5700	19.181	5690.410	5709.590	---	---
	Ant1	5720	19.101	5710.450	5729.550	---	---
	Ant2	5720	19.181	5710.410	5729.590	---	---
Ant1	5745	19.221	5735.370	5754.590	---	---	
Ant2	5745	19.301	5735.330	5754.630	---	---	



	Ant1	5785	19.221	5775.370	5794.590	---	---
	Ant2	5785	19.301	5775.330	5794.630	---	---
	Ant1	5825	19.261	5815.330	5834.590	---	---
	Ant2	5825	19.261	5815.330	5834.590	---	---
11AX40MIMO	Ant1	5190	38.042	5170.979	5209.021	---	---
	Ant2	5190	38.042	5170.979	5209.021	---	---
	Ant1	5230	38.122	5210.979	5249.101	---	---
	Ant2	5230	38.282	5210.899	5249.181	---	---
	Ant1	5270	38.202	5250.899	5289.101	---	---
	Ant2	5270	38.202	5250.899	5289.101	---	---
	Ant1	5310	38.042	5290.979	5329.021	---	---
	Ant2	5310	38.202	5290.899	5329.101	---	---
	Ant1	5510	38.202	5490.899	5529.101	---	---
	Ant2	5510	38.202	5490.899	5529.101	---	---
	Ant1	5550	38.042	5530.979	5569.021	---	---
	Ant2	5550	38.282	5530.819	5569.101	---	---
	Ant1	5670	38.042	5650.979	5689.021	---	---
	Ant2	5670	38.282	5650.899	5689.181	---	---
	Ant1	5710	38.122	5690.979	5729.101	---	---
	Ant2	5710	38.202	5690.899	5729.101	---	---
	Ant1	5755	38.042	5735.979	5774.021	---	---
	Ant2	5755	37.962	5735.979	5773.941	---	---
	Ant1	5795	37.962	5775.979	5813.941	---	---
	Ant2	5795	38.042	5775.979	5814.021	---	---
11AX80MIMO	Ant1	5210	78.002	5170.999	5249.001	---	---
	Ant2	5210	78.322	5170.839	5249.161	---	---
	Ant1	5290	78.002	5250.999	5329.001	---	---
	Ant2	5290	78.002	5250.999	5329.001	---	---
	Ant1	5530	77.842	5491.159	5569.001	---	---
	Ant2	5530	78.162	5490.839	5569.001	---	---
	Ant1	5610	78.002	5570.999	5649.001	---	---
	Ant2	5610	78.322	5570.839	5649.161	---	---
	Ant1	5690	78.162	5650.999	5729.161	---	---
	Ant2	5690	78.482	5650.839	5729.321	---	---
	Ant1	5775	78.002	5735.839	5813.841	---	---
	Ant2	5775	78.162	5735.839	5814.001	---	---



Tx Beamforming mode								
Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict	
11AX20MIMO	Ant1	5180	19.101	5170.450	5189.550	---	---	
	Ant2	5180	19.101	5170.450	5189.550	---	---	
	Ant1	5220	19.101	5210.410	5229.510	---	---	
	Ant2	5220	19.101	5210.450	5229.550	---	---	
	Ant1	5240	19.061	5230.490	5249.550	---	---	
	Ant2	5240	19.021	5230.529	5249.550	---	---	
	Ant1	5260	19.101	5250.410	5269.510	---	---	
	Ant2	5260	19.061	5250.450	5269.510	---	---	
	Ant1	5300	19.061	5290.450	5309.510	---	---	
	Ant2	5300	19.061	5290.490	5309.550	---	---	
	Ant1	5320	19.061	5310.450	5329.510	---	---	
	Ant2	5320	19.061	5310.490	5329.550	---	---	
	Ant1	5500	19.061	5490.450	5509.510	---	---	
	Ant2	5500	19.061	5490.490	5509.550	---	---	
	Ant1	5580	19.101	5570.450	5589.550	---	---	
	Ant2	5580	19.101	5570.450	5589.550	---	---	
	Ant1	5700	19.101	5690.450	5709.550	---	---	
	Ant2	5700	19.101	5690.450	5709.550	---	---	
	Ant1	5720	19.061	5710.450	5729.510	---	---	
	Ant2	5720	19.061	5710.450	5729.510	---	---	
	Ant1	5745	19.461	5735.250	5754.710	---	---	
	Ant2	5745	19.62	5735.210	5754.830	---	---	
	Ant1	5785	19.54	5775.210	5794.750	---	---	
	Ant2	5785	19.74	5775.090	5794.830	---	---	
	Ant1	5825	19.54	5815.170	5834.710	---	---	
	Ant2	5825	19.62	5815.170	5834.790	---	---	
	11AX40MIMO	Ant1	5190	38.042	5170.979	5209.021	---	---
		Ant2	5190	38.122	5170.979	5209.101	---	---
Ant1		5230	38.122	5210.979	5249.101	---	---	
Ant2		5230	38.122	5210.979	5249.101	---	---	
Ant1		5270	38.202	5250.899	5289.101	---	---	
Ant2		5270	38.202	5250.899	5289.101	---	---	
Ant1		5310	38.042	5290.979	5329.021	---	---	
Ant2		5310	38.042	5290.979	5329.021	---	---	
Ant1		5510	38.122	5490.979	5529.101	---	---	
Ant2		5510	38.122	5490.979	5529.101	---	---	
Ant1		5550	38.042	5530.979	5569.021	---	---	
Ant2		5550	38.362	5530.819	5569.181	---	---	
Ant1		5670	38.202	5650.899	5689.101	---	---	
Ant2		5670	38.202	5650.899	5689.101	---	---	
Ant1		5710	38.122	5690.979	5729.101	---	---	
Ant2		5710	38.282	5690.899	5729.181	---	---	
Ant1		5755	38.601	5735.659	5774.261	---	---	
Ant2		5755	38.761	5735.579	5774.341	---	---	
Ant1	5795	38.521	5775.739	5814.261	---	---		
Ant2	5795	39.001	5775.420	5814.421	---	---		
11AX80MIMO	Ant1	5210	78.002	5170.999	5249.001	---	---	



	Ant2	5210	78.002	5170.999	5249.001	---	---
	Ant1	5290	77.842	5250.999	5328.841	---	---
	Ant2	5290	77.842	5250.999	5328.841	---	---
	Ant1	5530	77.842	5491.159	5569.001	---	---
	Ant2	5530	77.842	5490.999	5568.841	---	---
	Ant1	5610	77.522	5571.319	5648.841	---	---
	Ant2	5610	78.002	5570.999	5649.001	---	---
	Ant1	5690	77.842	5651.159	5729.001	---	---
	Ant2	5690	78.162	5650.999	5729.161	---	---
	Ant1	5775	78.482	5735.679	5814.161	---	---
	Ant2	5775	78.961	5735.519	5814.481	---	---

Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.



<6dB EBW>

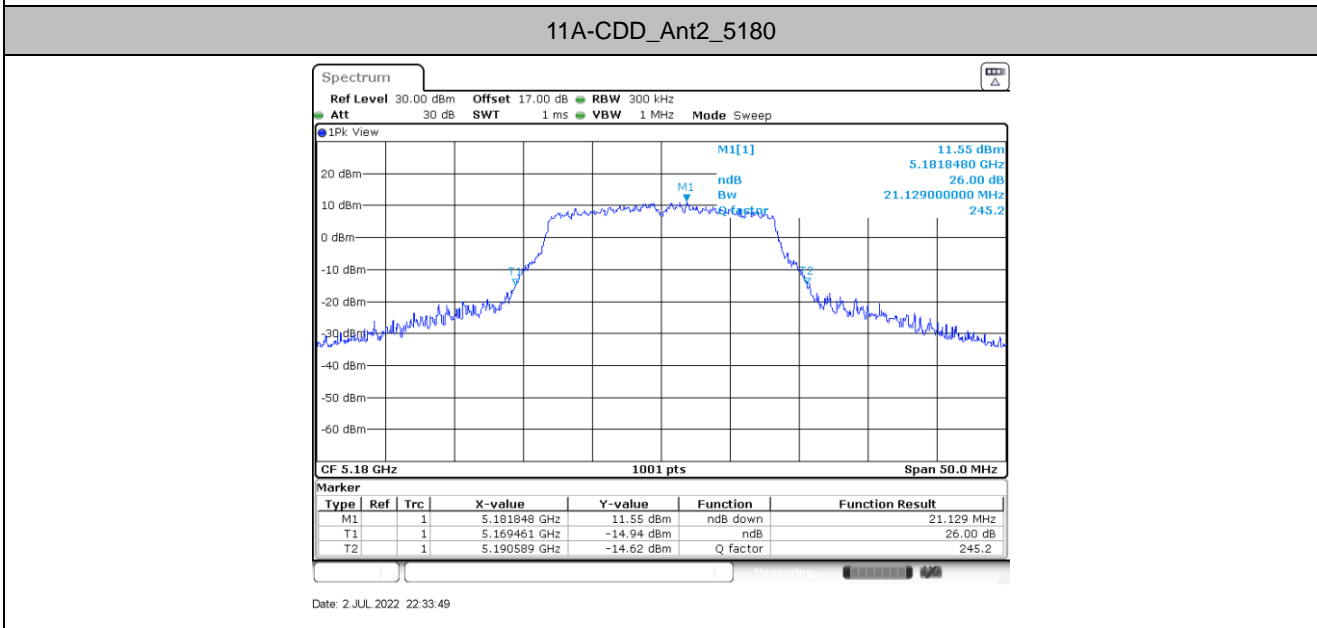
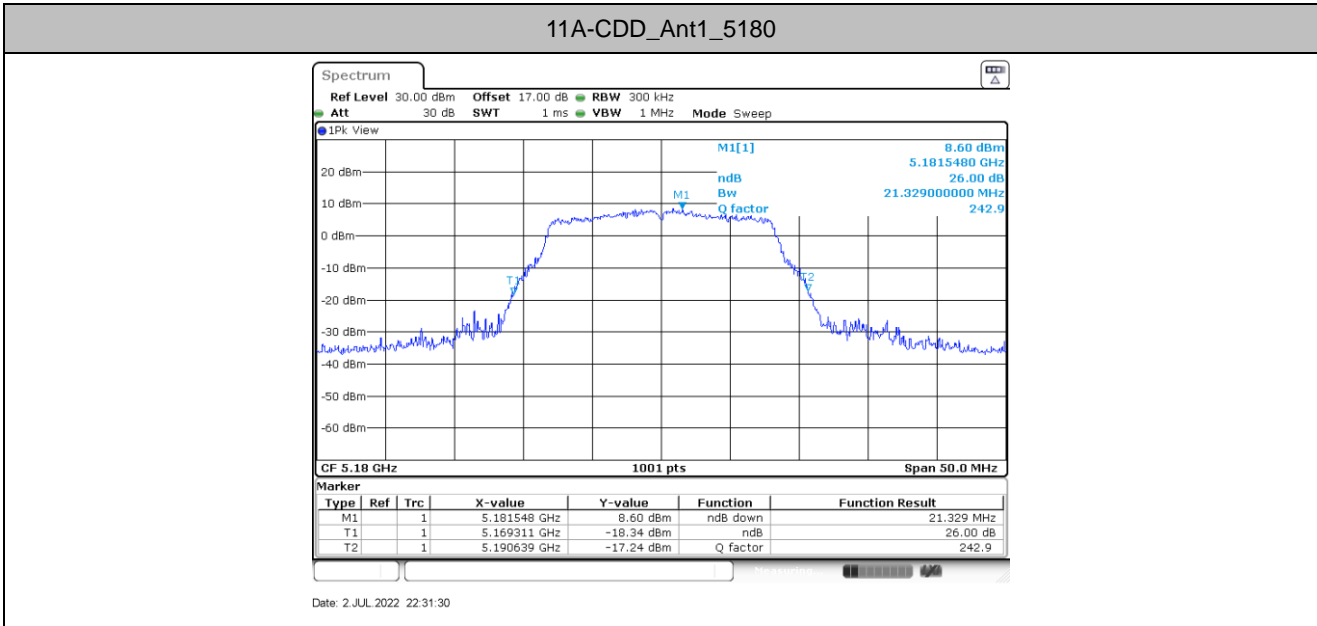
Test Mode	Antenna	Frequency[MHz]	6dB EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A-CDD	Ant1	5745	16.28	5736.84	5753.12	0.5	PASS
	Ant2	5745	16.32	5736.84	5753.16	0.5	PASS
	Ant1	5785	16.32	5776.84	5793.16	0.5	PASS
	Ant2	5785	16.32	5776.84	5793.16	0.5	PASS
	Ant1	5825	16.32	5816.84	5833.16	0.5	PASS
	Ant2	5825	16.36	5816.80	5833.16	0.5	PASS
11AX20MIMO	Ant1	5745	18.68	5735.60	5754.28	0.5	PASS
	Ant2	5745	17.68	5736.28	5753.96	0.5	PASS
	Ant1	5785	18.24	5775.96	5794.20	0.5	PASS
	Ant2	5785	18.64	5775.72	5794.36	0.5	PASS
	Ant1	5825	18.60	5815.60	5834.20	0.5	PASS
	Ant2	5825	18.76	5815.60	5834.36	0.5	PASS
11AX40MIMO	Ant1	5755	37.76	5736.12	5773.88	0.5	PASS
	Ant2	5755	37.60	5736.20	5773.80	0.5	PASS
	Ant1	5795	37.44	5776.12	5813.56	0.5	PASS
	Ant2	5795	37.52	5776.20	5813.72	0.5	PASS
11AX80MIMO	Ant1	5775	77.60	5736.12	5813.72	0.5	PASS
	Ant2	5775	77.60	5736.12	5813.72	0.5	PASS

Tx Beamforming mode							
Test Mode	Antenna	Frequency[MHz]	6dB EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11AX20MIMO	Ant1	5745	17.56	5736.20	5753.76	0.5	PASS
	Ant2	5745	16.80	5737.40	5754.20	0.5	PASS
	Ant1	5785	18.00	5775.88	5793.88	0.5	PASS
	Ant2	5785	18.84	5775.52	5794.36	0.5	PASS
	Ant1	5825	18.44	5815.84	5834.28	0.5	PASS
	Ant2	5825	17.08	5816.12	5833.20	0.5	PASS
11AX40MIMO	Ant1	5755	37.84	5736.04	5773.88	0.5	PASS
	Ant2	5755	37.52	5736.20	5773.72	0.5	PASS
	Ant1	5795	37.60	5776.20	5813.80	0.5	PASS
	Ant2	5795	37.44	5776.20	5813.64	0.5	PASS
11AX80MIMO	Ant1	5775	76.96	5736.44	5813.40	0.5	PASS
	Ant2	5775	76.16	5736.60	5812.76	0.5	PASS



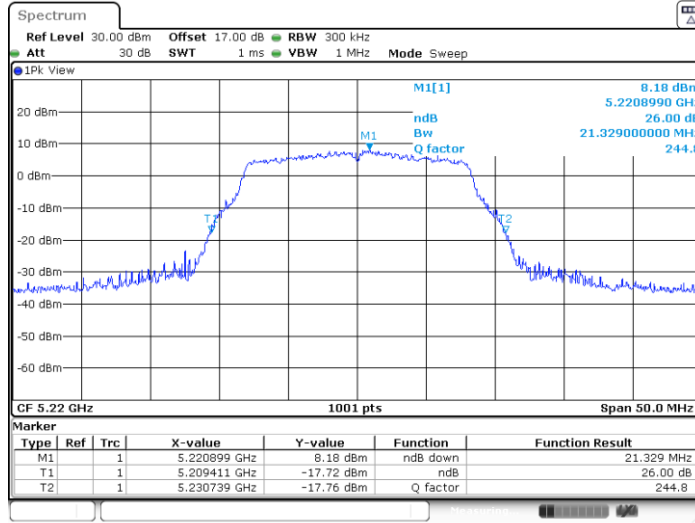
3.1.6 Test Graphs of 6dB & 26dB & 99% Occupied Bandwidth

<26dB EBW>



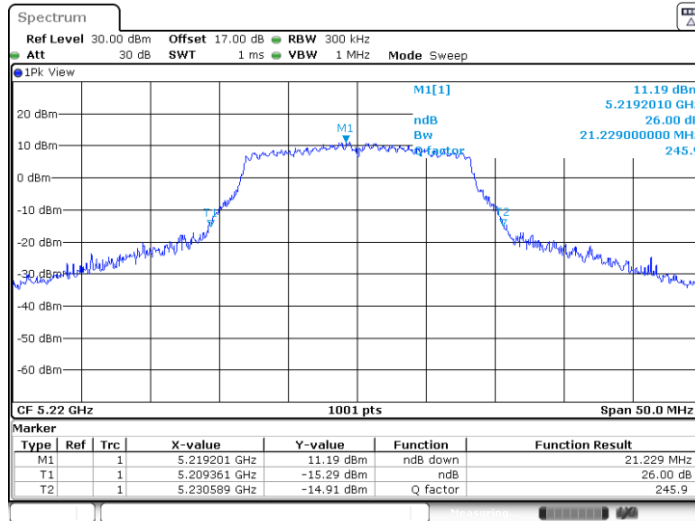


11A-CDD_Ant1_5220



Date: 2 JUL 2022 22:41:11

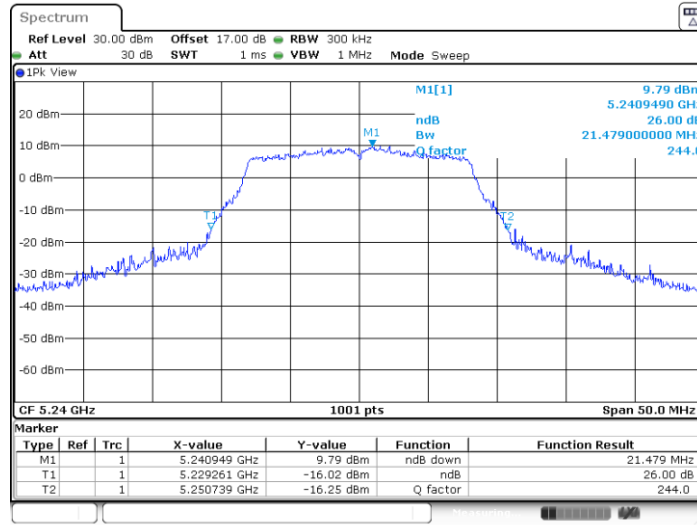
11A-CDD_Ant2_5220



Date: 2 JUL 2022 22:48:20

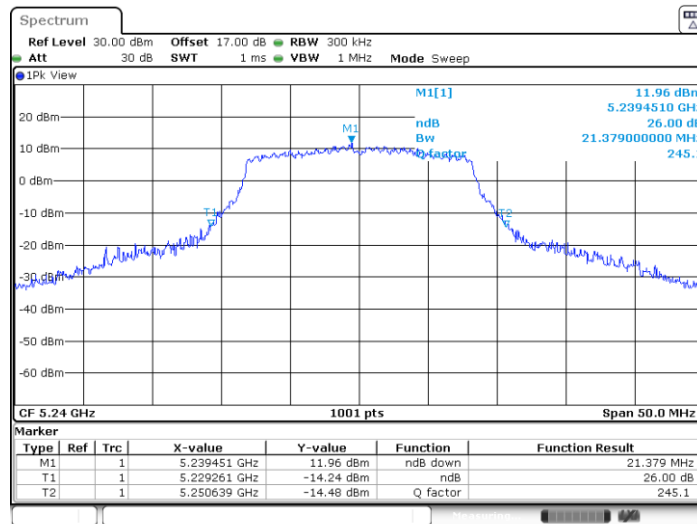


11A-CDD_Ant1_5240



Date: 2 JUL 2022 22:55:00

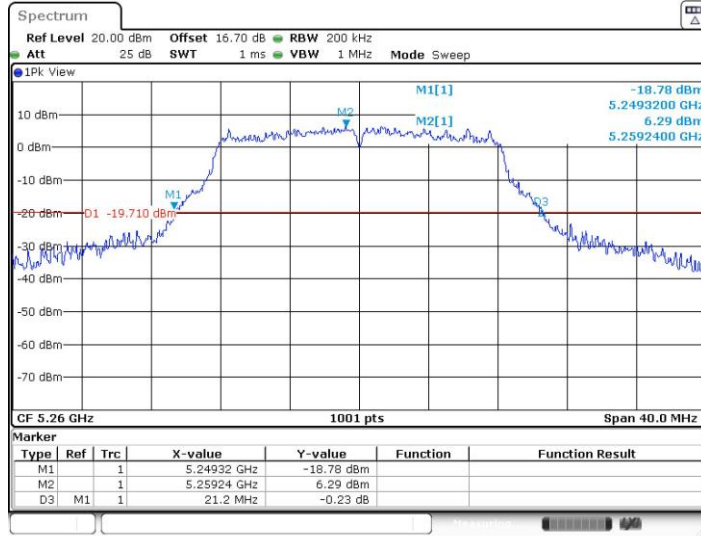
11A-CDD_Ant2_5240



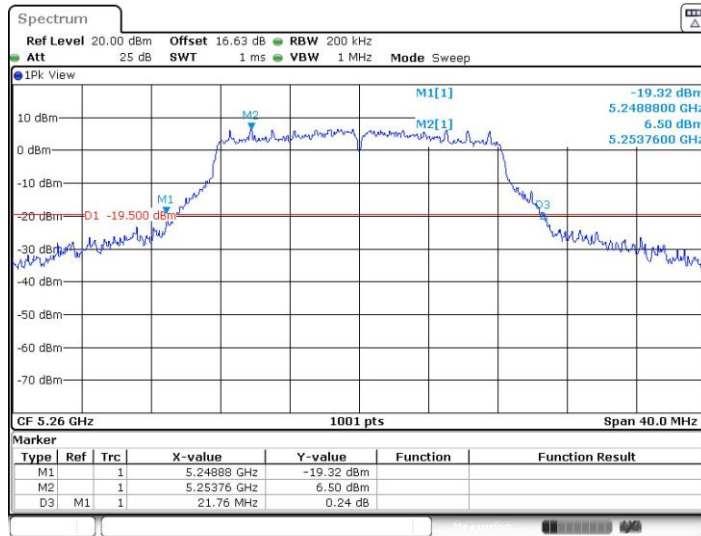
Date: 2 JUL 2022 22:54:24



11A-CDD_Ant1_5260

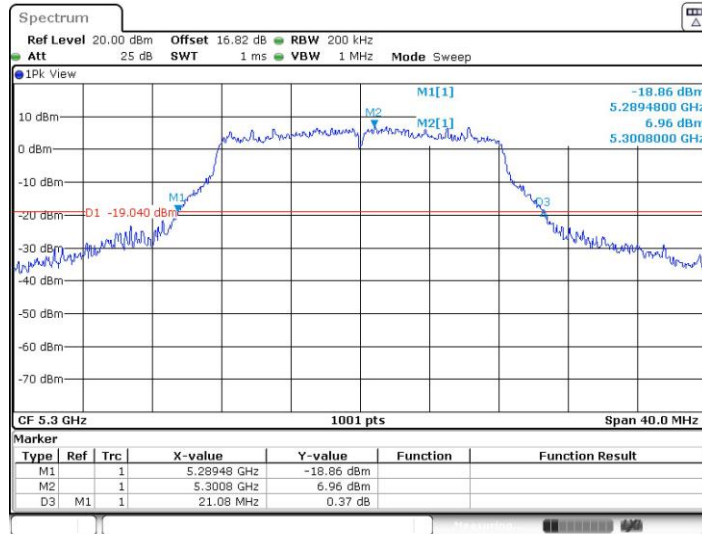


11A-CDD_Ant2_5260

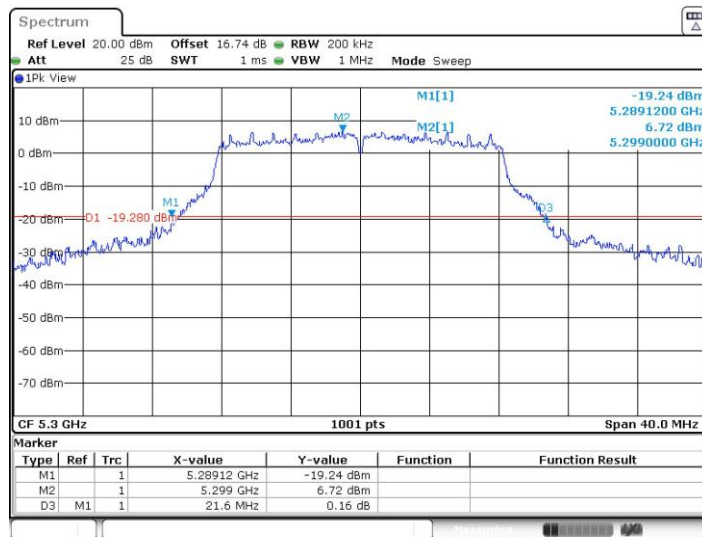




11A-CDD_Ant1_5300

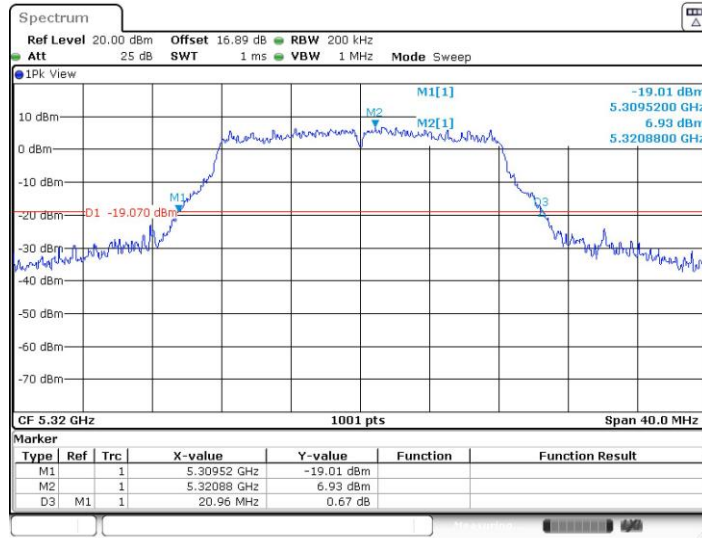


11A-CDD_Ant2_5300

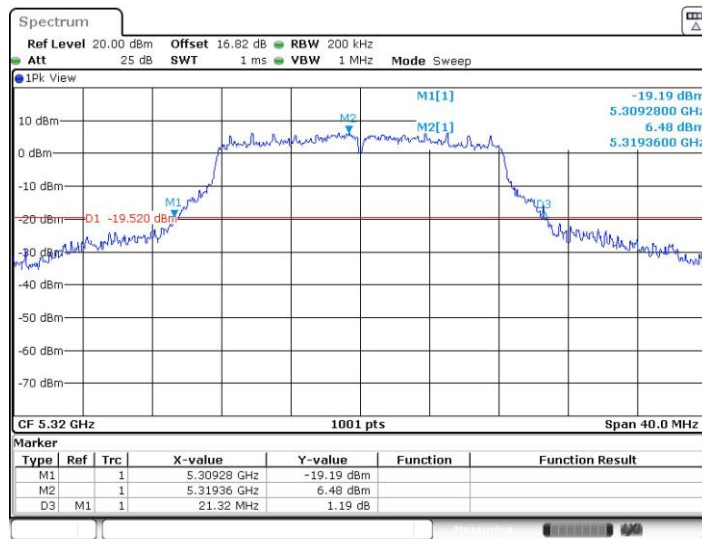




11A-CDD_Ant1_5320

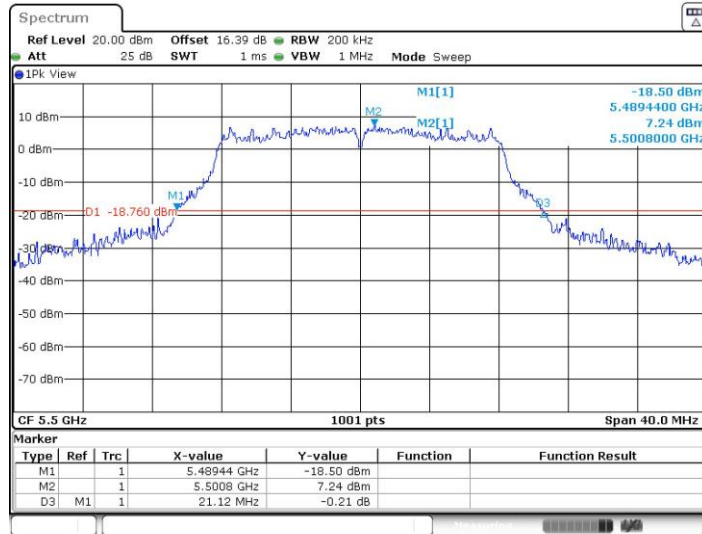


11A-CDD_Ant2_5320

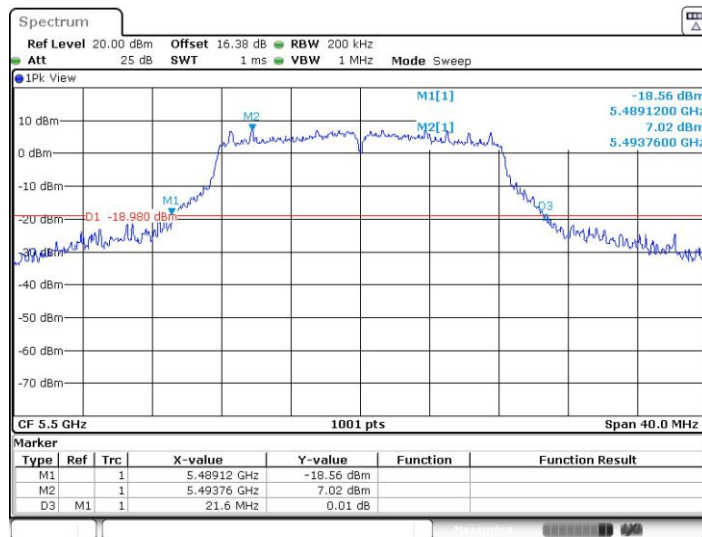




11A-CDD_Ant1_5500

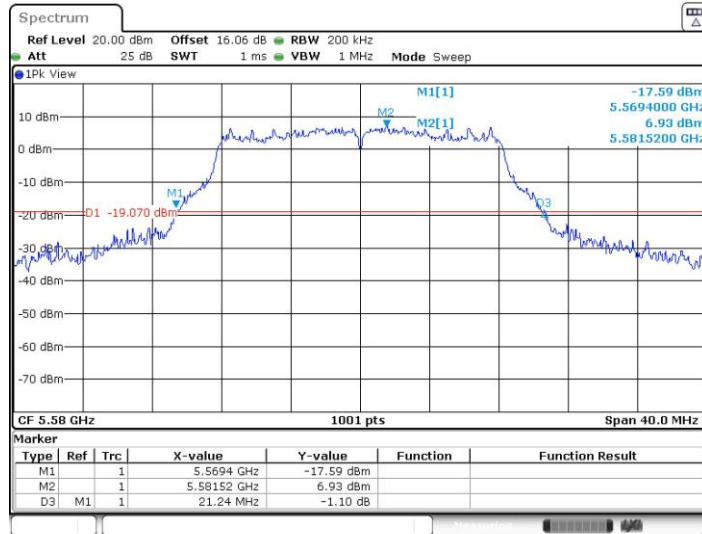


11A-CDD_Ant2_5500

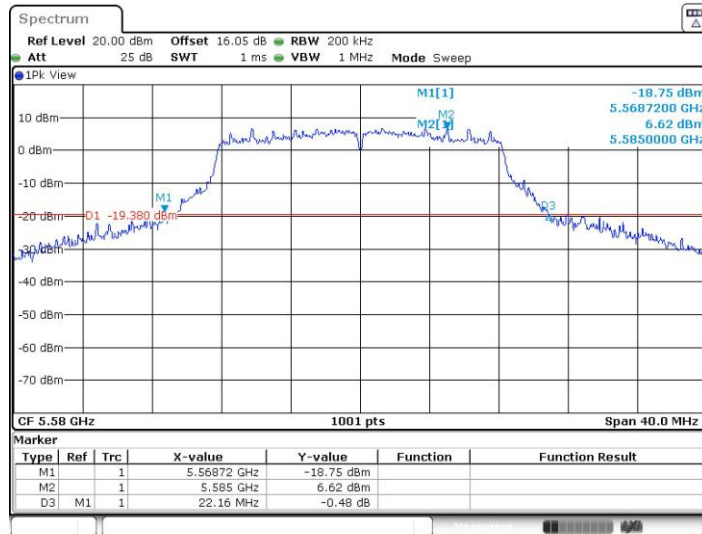




11A-CDD_Ant1_5580

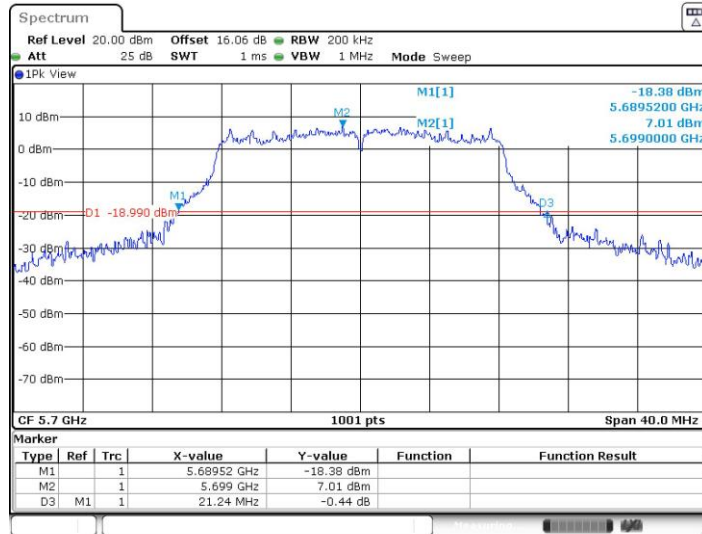


11A-CDD_Ant2_5580

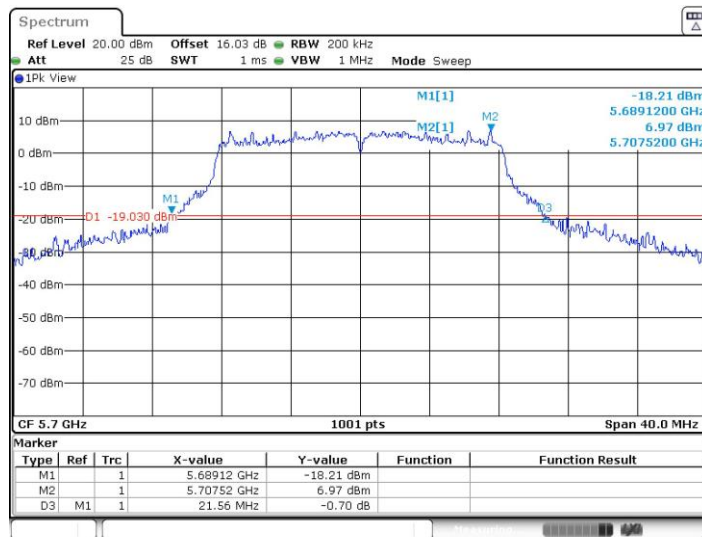




11A-CDD_Ant1_5700

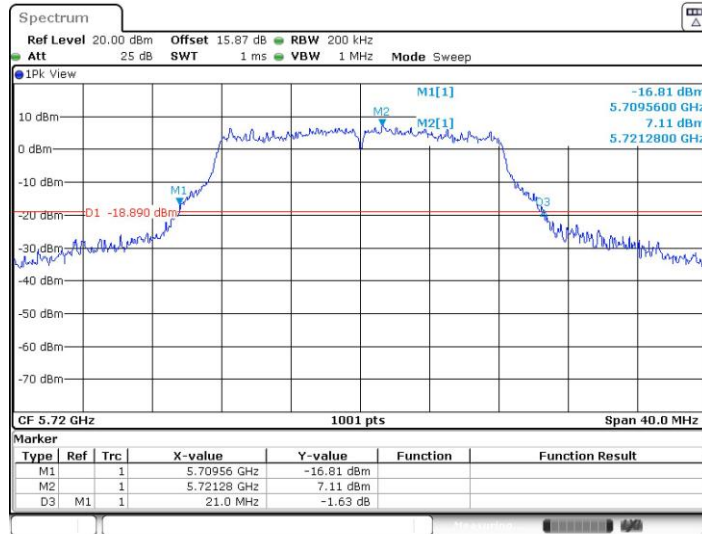


11A-CDD_Ant2_5700



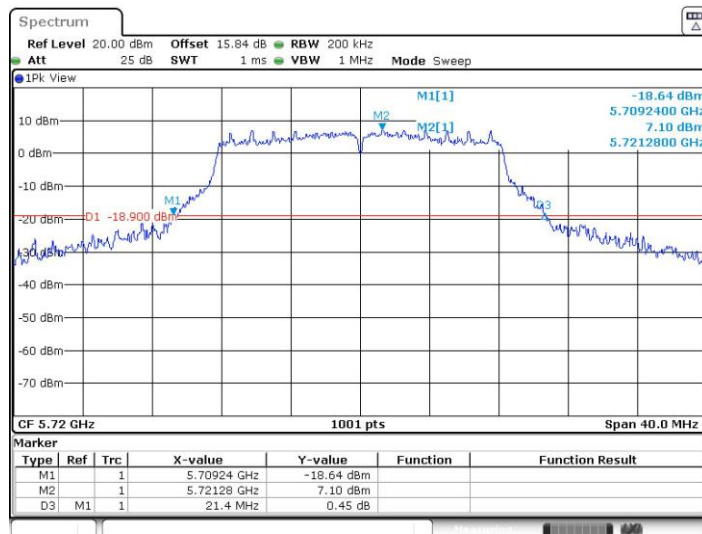


11A-CDD_Ant1_5720



Date: 18.MAY.2022 04:05:26

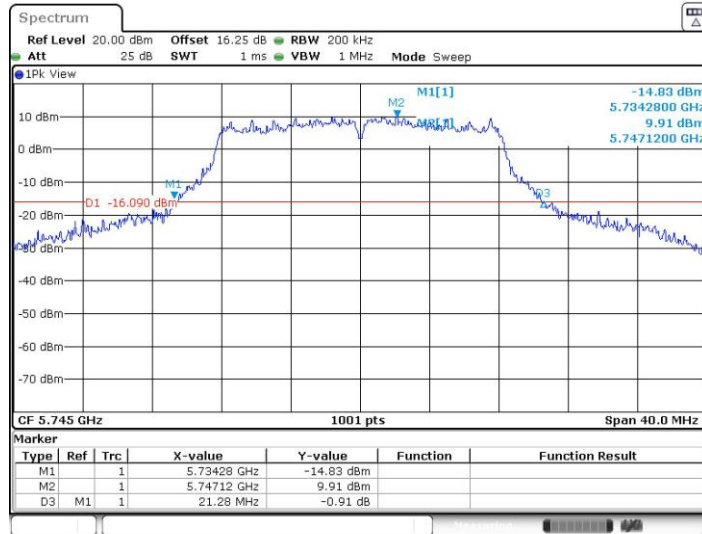
11A-CDD_Ant2_5720



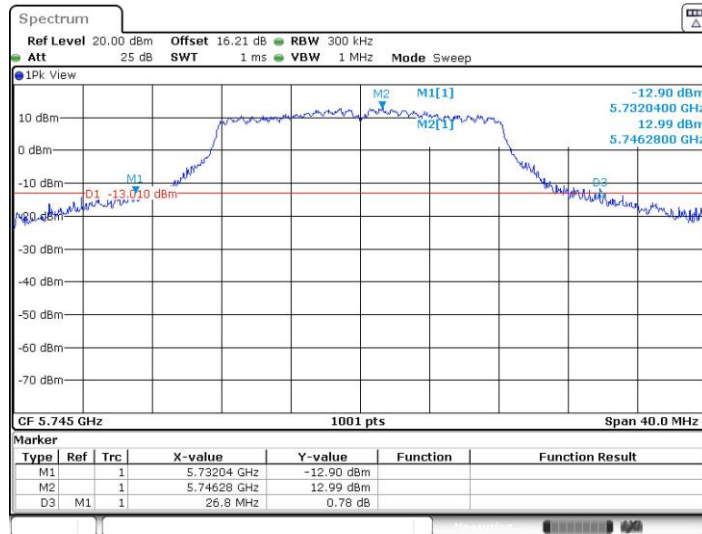
Date: 18.MAY.2022 04:05:55



11A-CDD_Ant1_5745

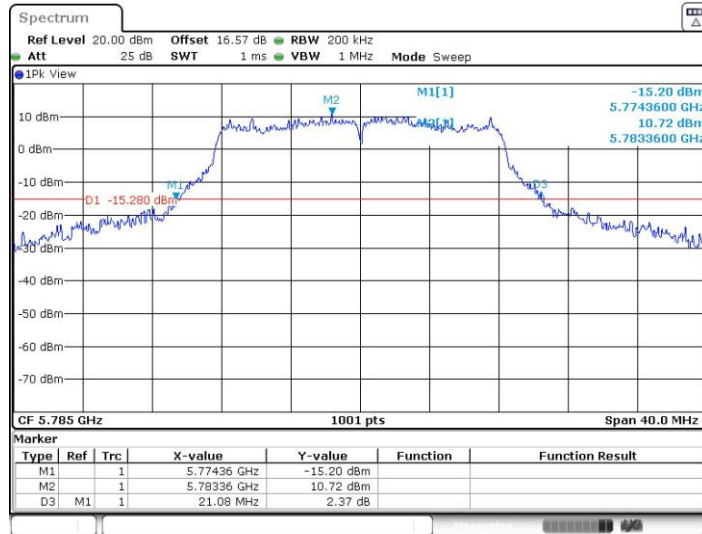


11A-CDD_Ant2_5745



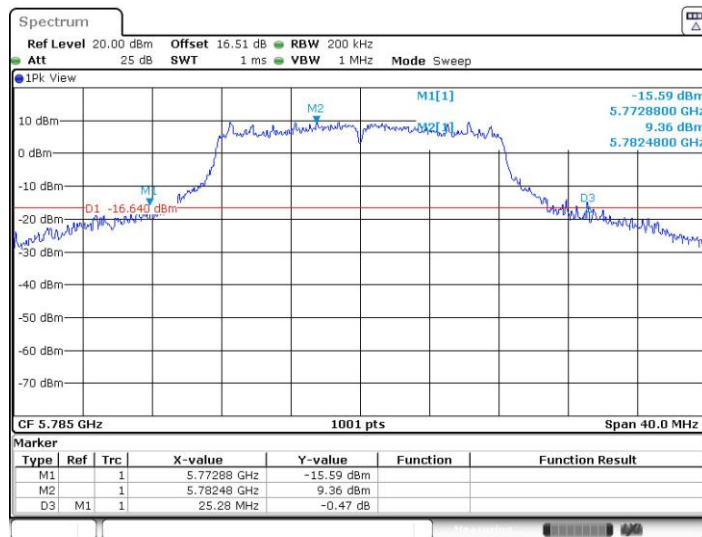


11A-CDD_Ant1_5785



Date: 7.JUN.2022 23:11:51

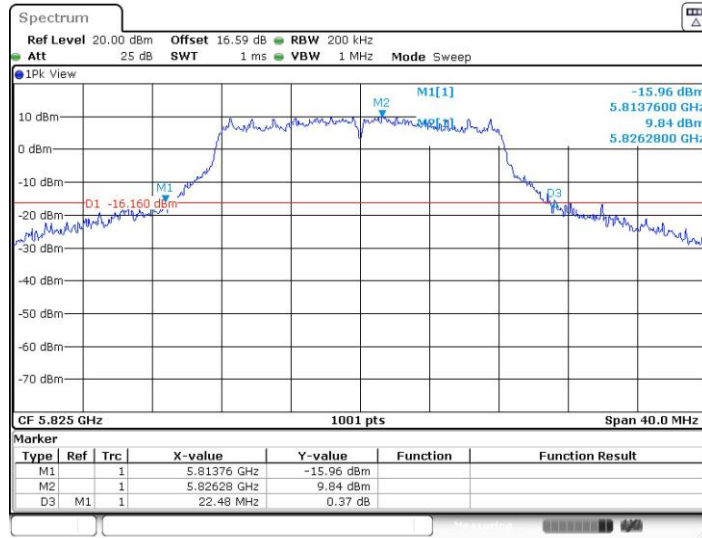
11A-CDD_Ant2_5785



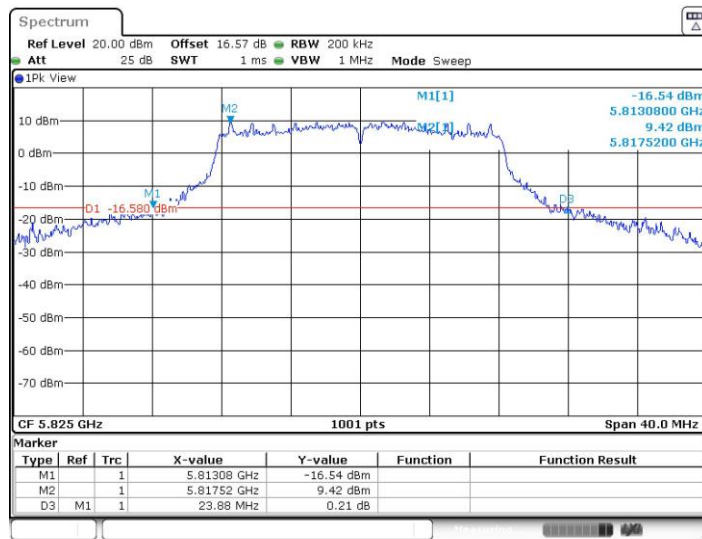
Date: 7.JUN.2022 23:13:00



11A-CDD_Ant1_5825

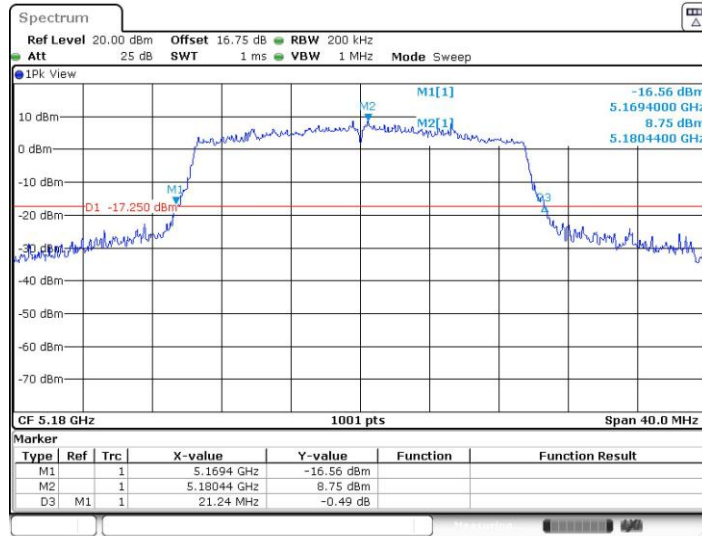


11A-CDD_Ant2_5825

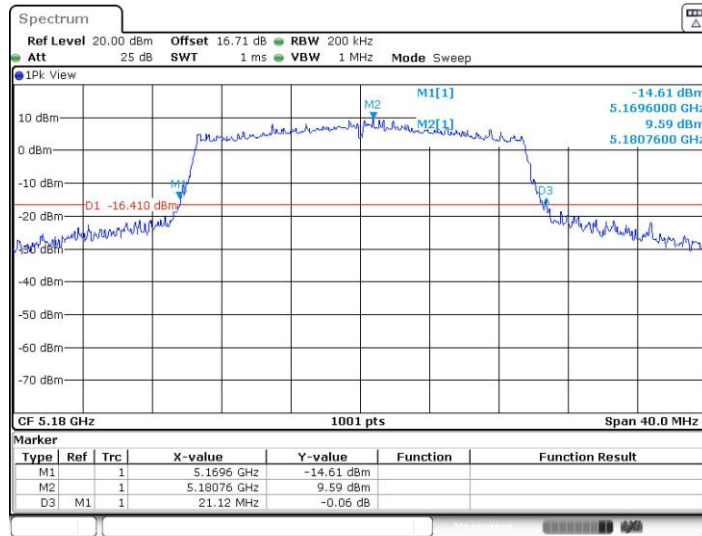




11AX20MIMO_Ant1_5180

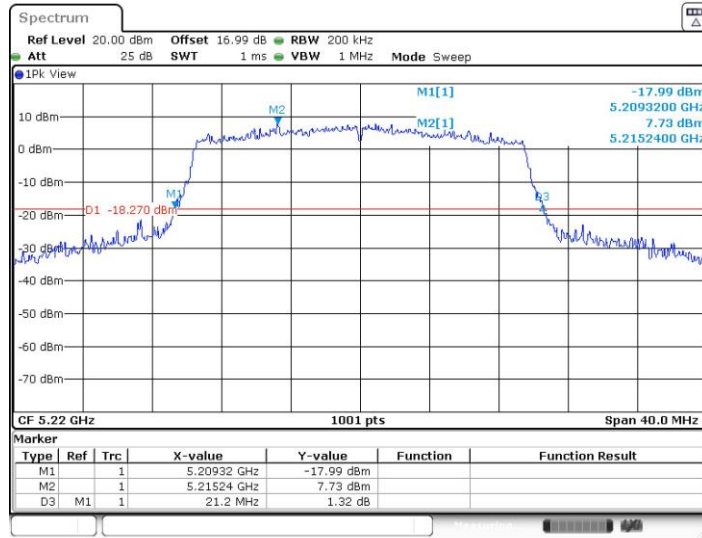


11AX20MIMO_Ant2_5180

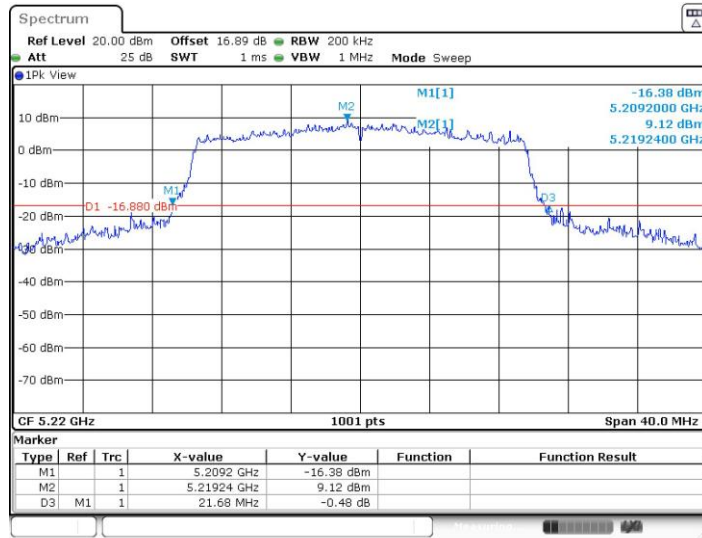




11AX20MIMO_Ant1_5220

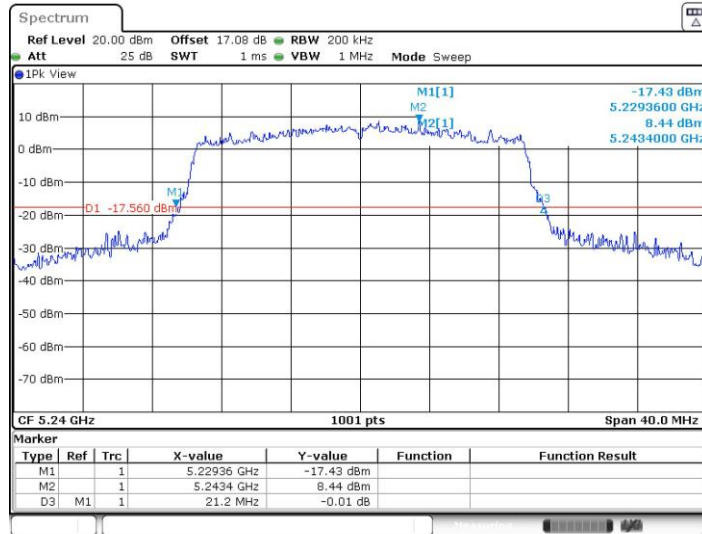


11AX20MIMO_Ant2_5220

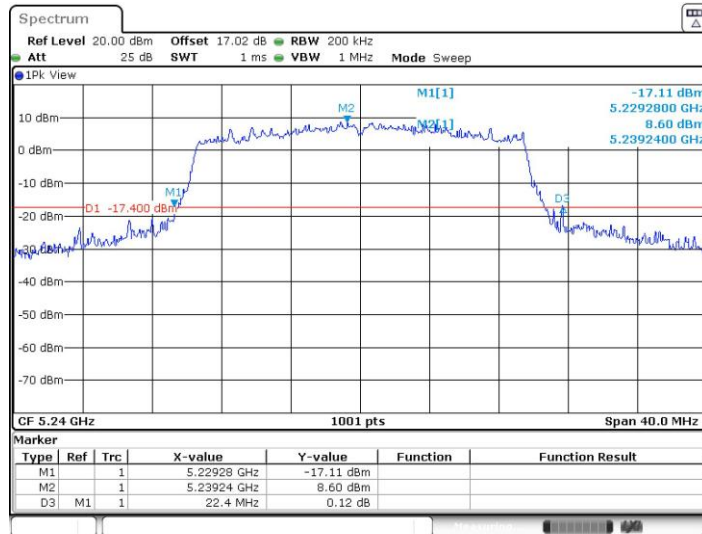




11AX20MIMO_Ant1_5240

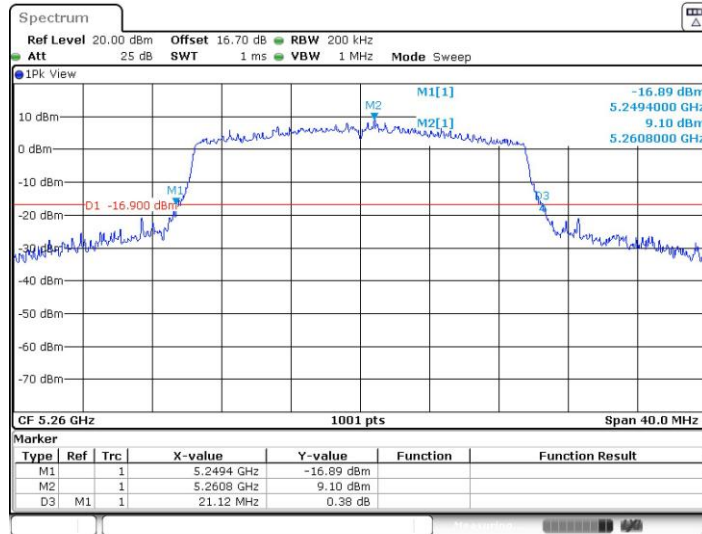


11AX20MIMO_Ant2_5240

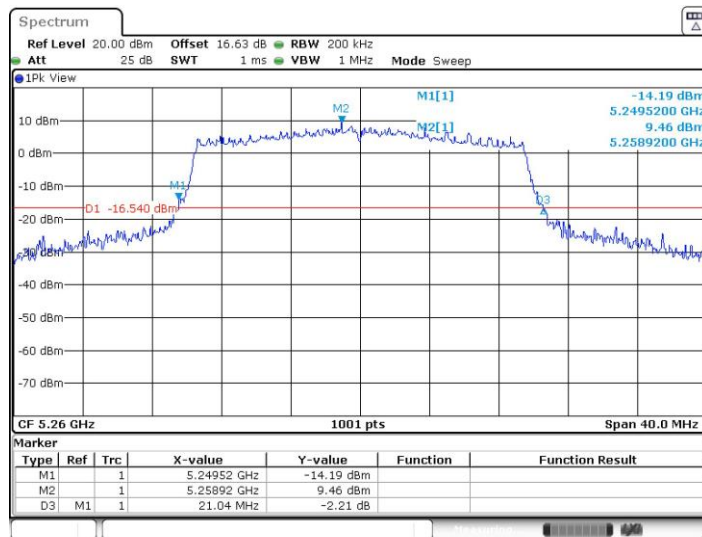




11AX20MIMO_Ant1_5260

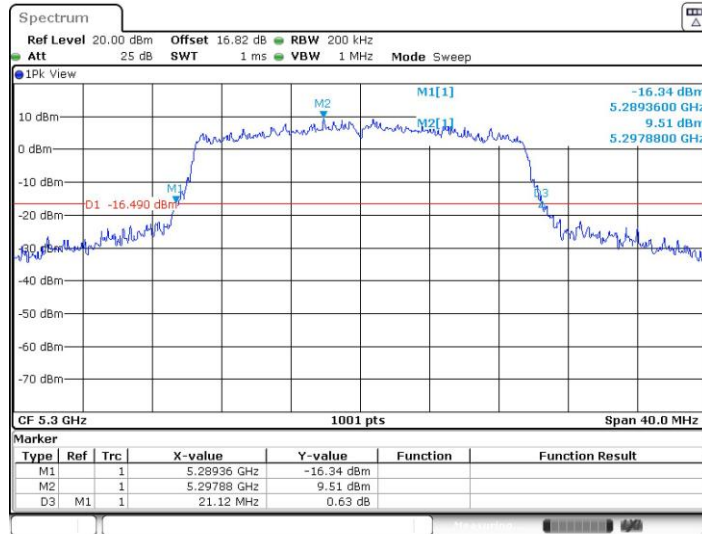


11AX20MIMO_Ant2_5260

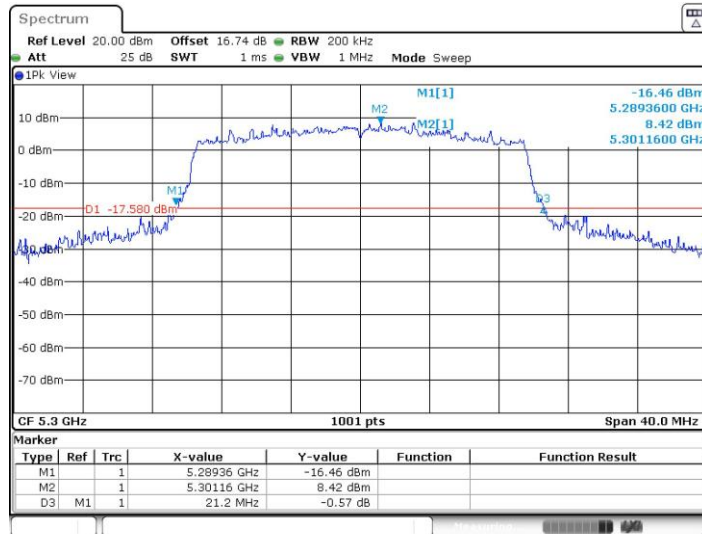




11AX20MIMO_Ant1_5300

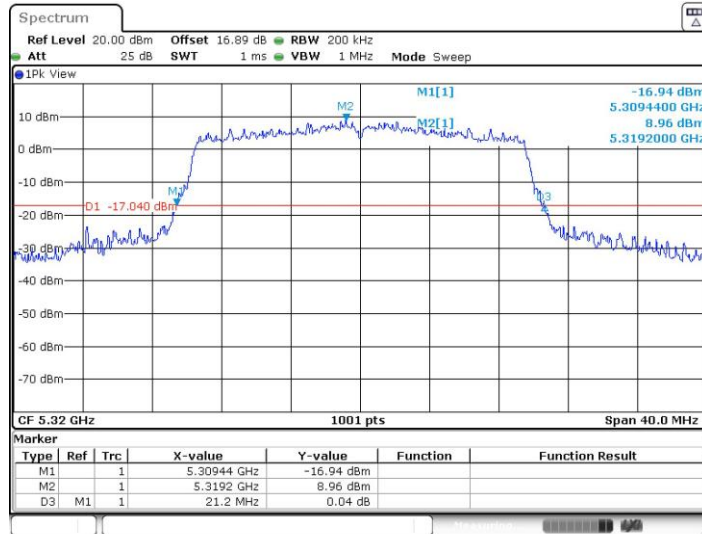


11AX20MIMO_Ant2_5300

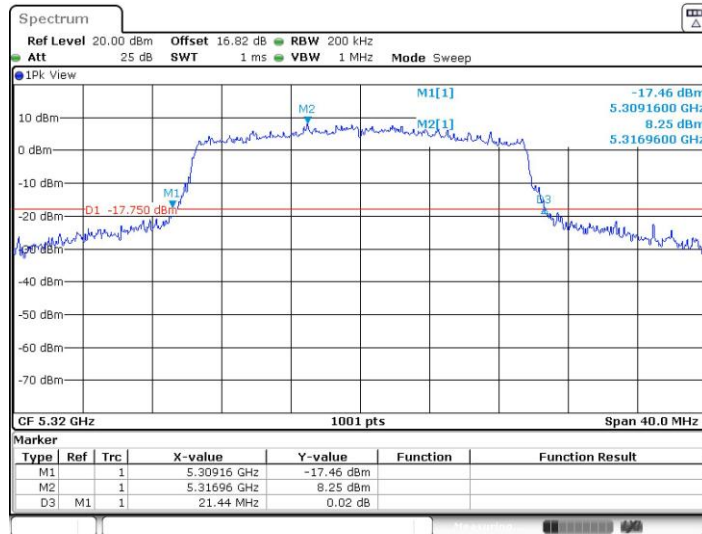




11AX20MIMO_Ant1_5320

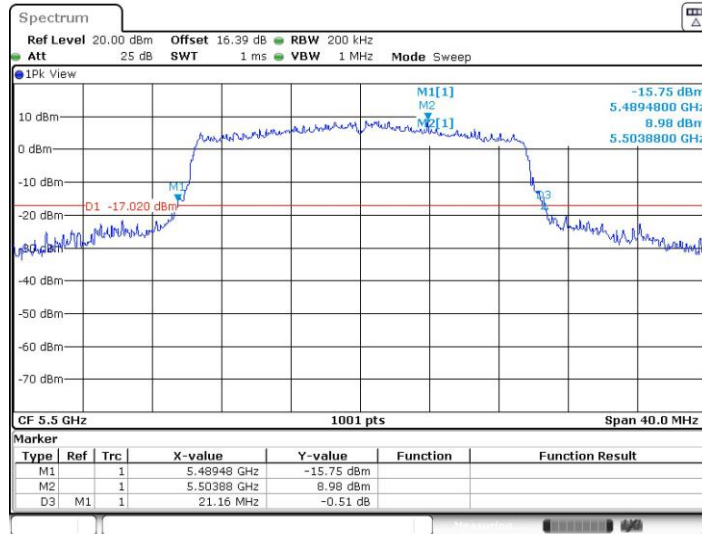


11AX20MIMO_Ant2_5320

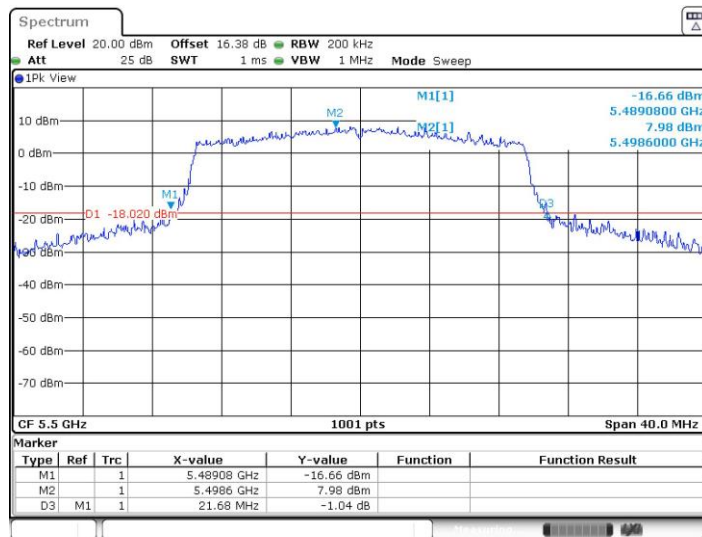




11AX20MIMO_Ant1_5500

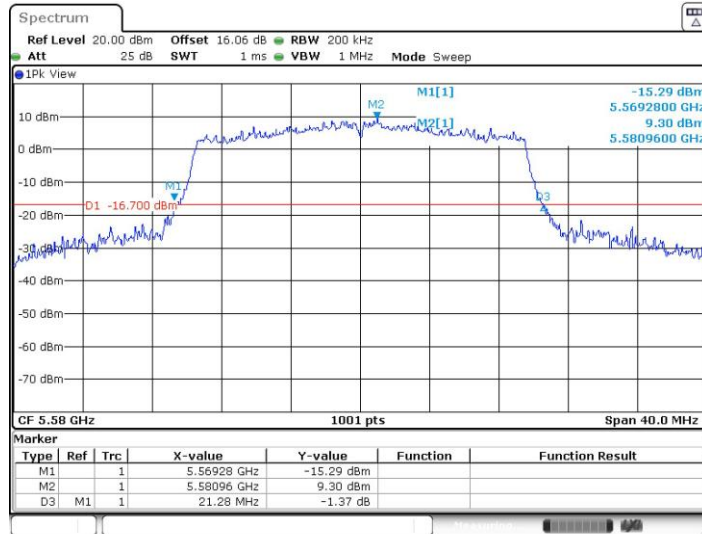


11AX20MIMO_Ant2_5500



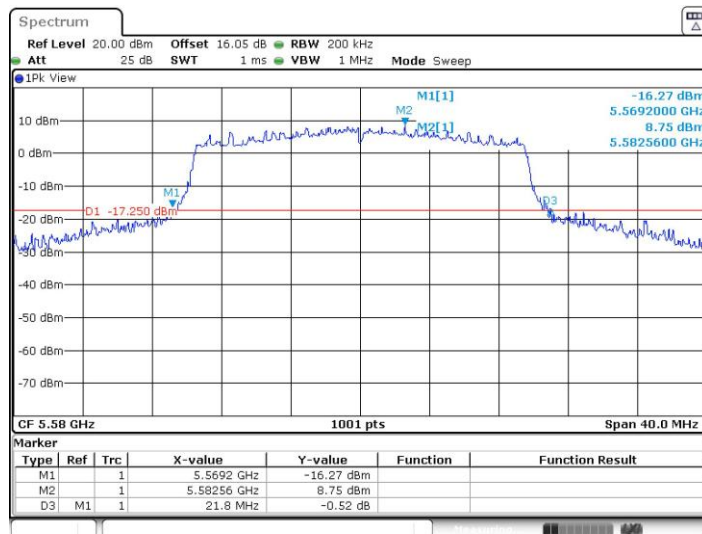


11AX20MIMO_Ant1_5580



Date: 18.MAY.2022 05:05:01

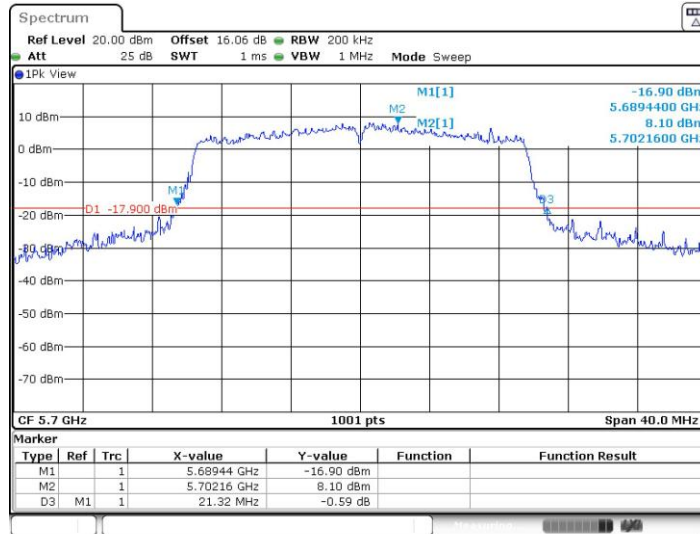
11AX20MIMO_Ant2_5580



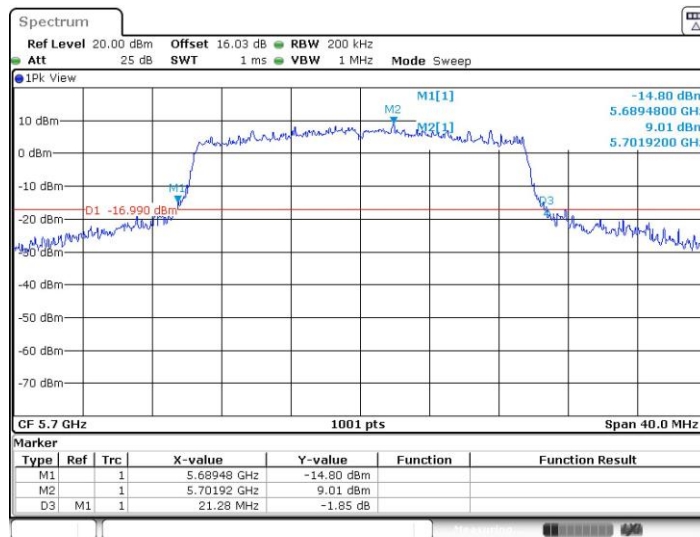
Date: 18.MAY.2022 05:05:29



11AX20MIMO_Ant1_5700

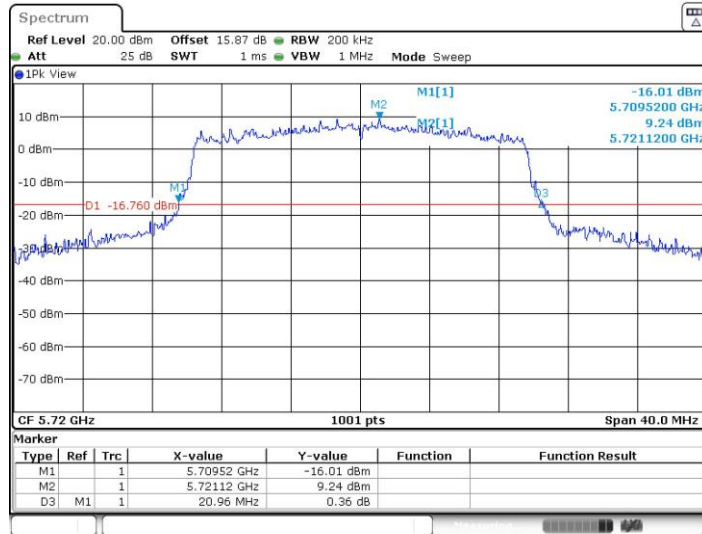


11AX20MIMO_Ant2_5700

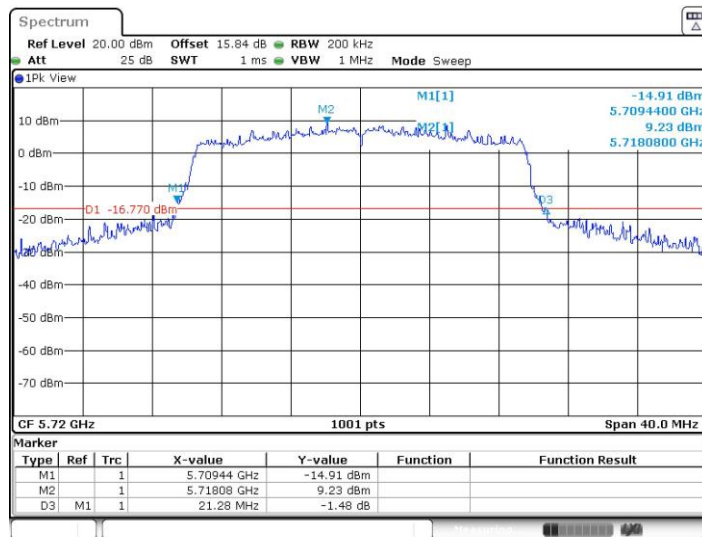




11AX20MIMO_Ant1_5720

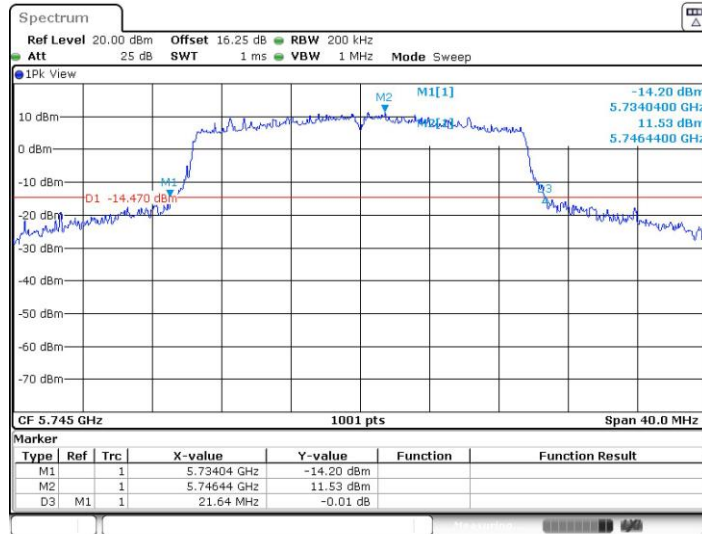


11AX20MIMO_Ant2_5720



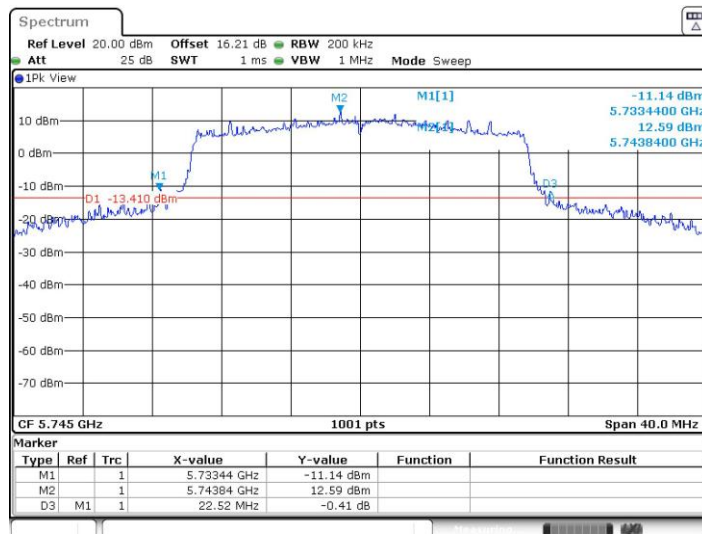


11AX20MIMO_Ant1_5745



Date: 7.JUN.2022 23:19:49

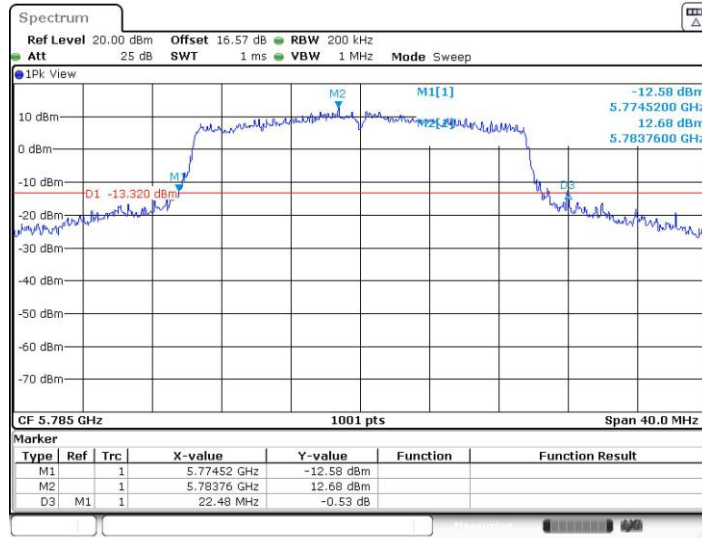
11AX20MIMO_Ant2_5745



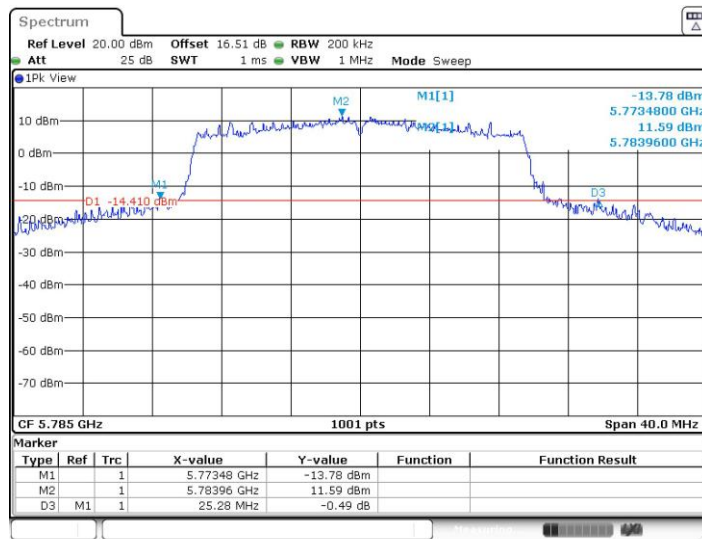
Date: 7.JUN.2022 23:20:58



11AX20MIMO_Ant1_5785

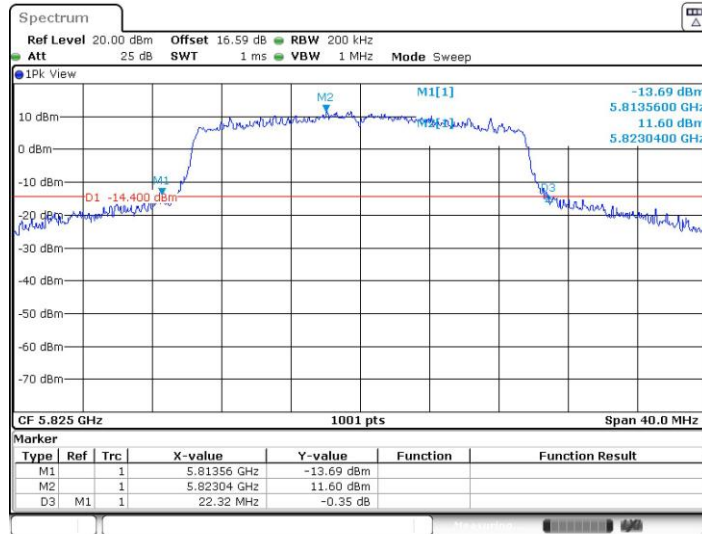


11AX20MIMO_Ant2_5785

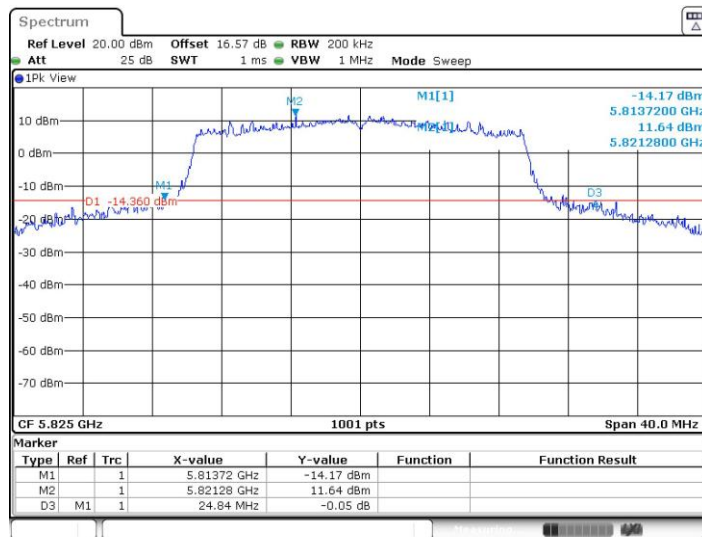




11AX20MIMO_Ant1_5825

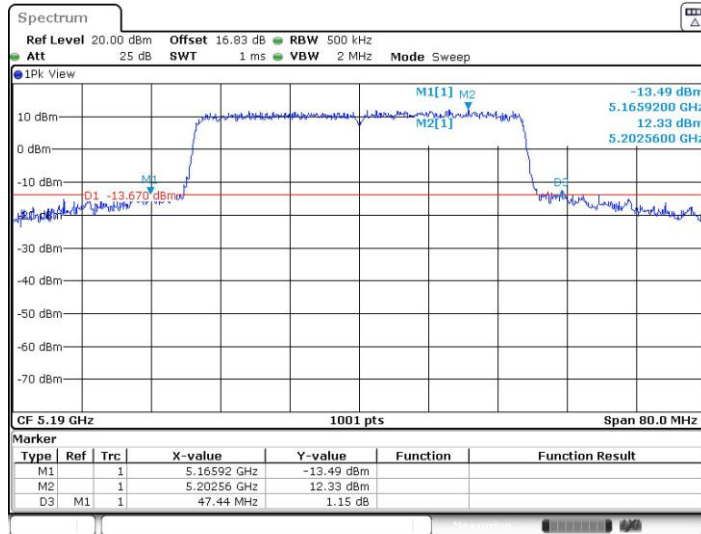


11AX20MIMO_Ant2_5825



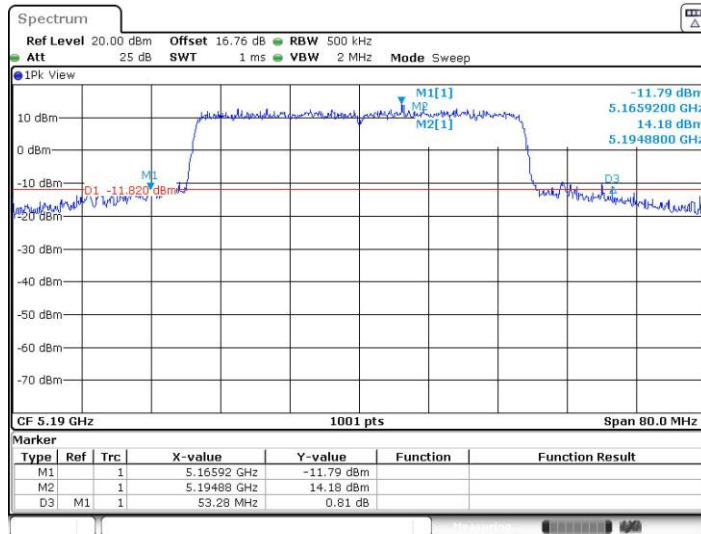


11AX40MIMO_Ant1_5190



Date: 18.MAY.2022 05:08:53

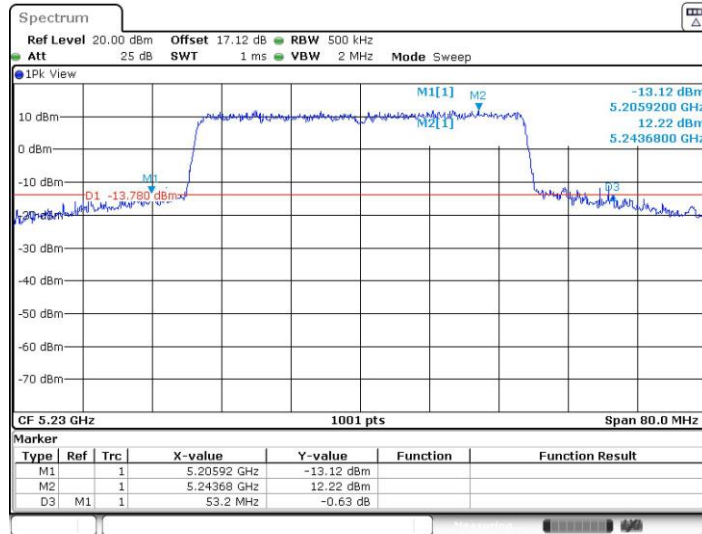
11AX40MIMO_Ant2_5190



Date: 18.MAY.2022 05:09:22

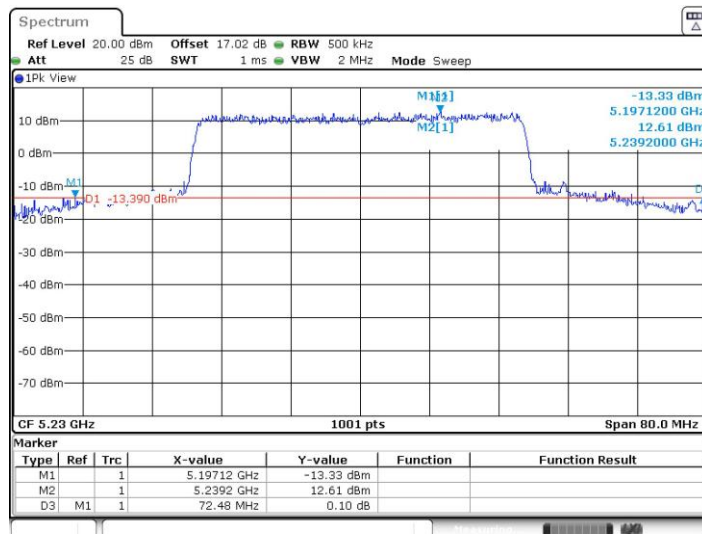


11AX40MIMO_Ant1_5230



Date: 18.MAY.2022 05:10:19

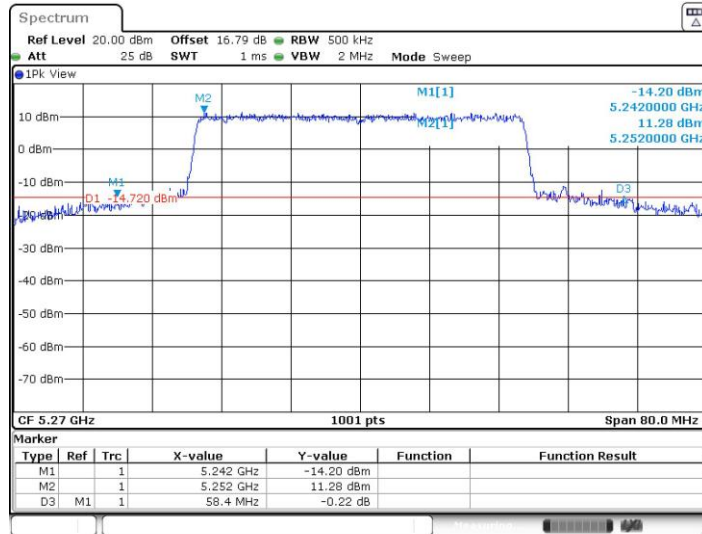
11AX40MIMO_Ant2_5230



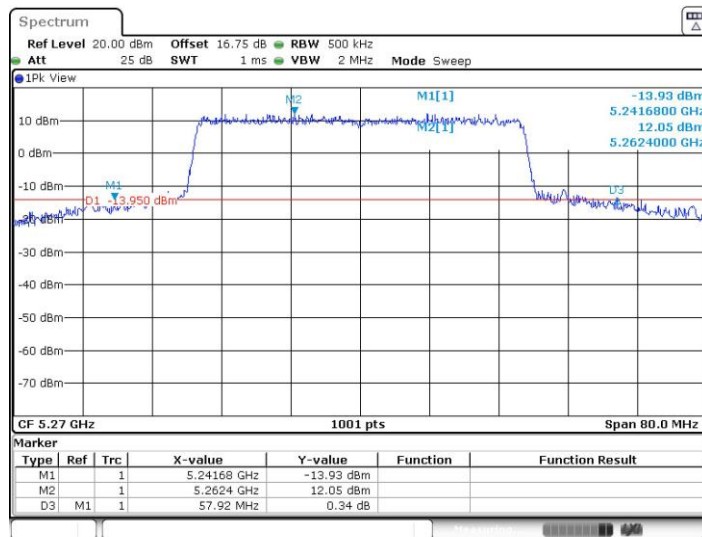
Date: 18.MAY.2022 05:10:47



11AX40MIMO_Ant1_5270

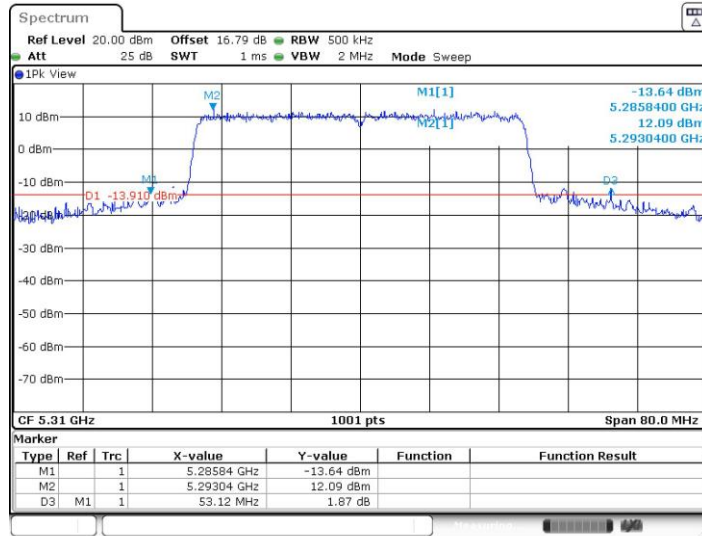


11AX40MIMO_Ant2_5270



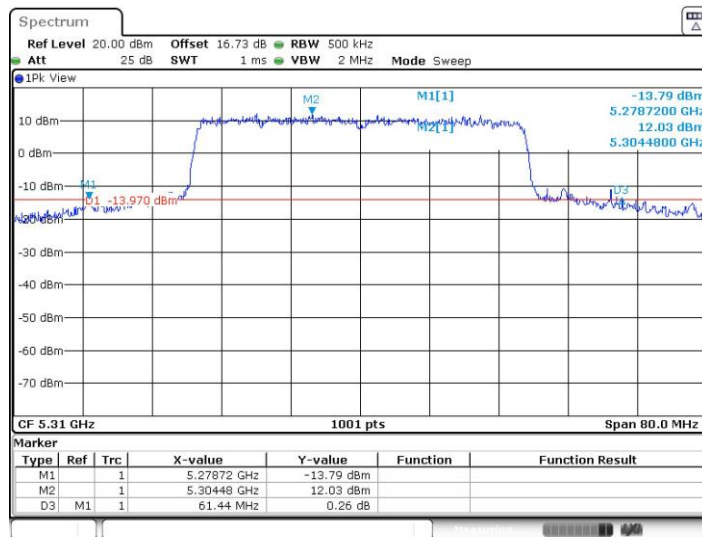


11AX40MIMO_Ant1_5310



Date: 18.MAY.2022 05:12:53

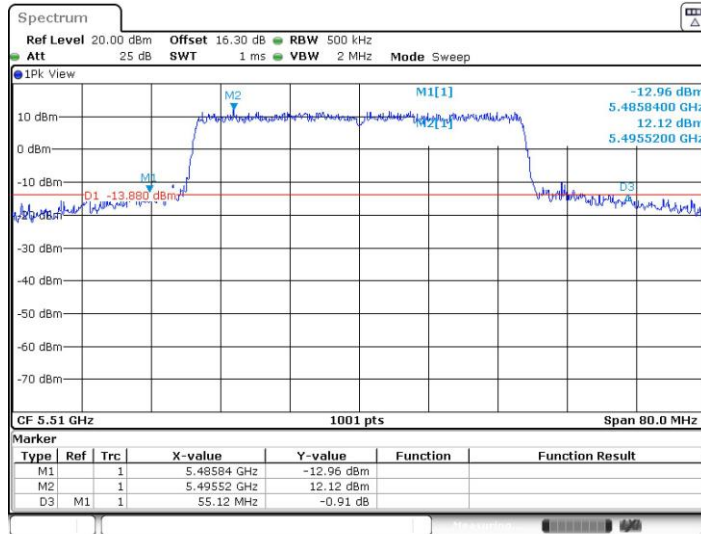
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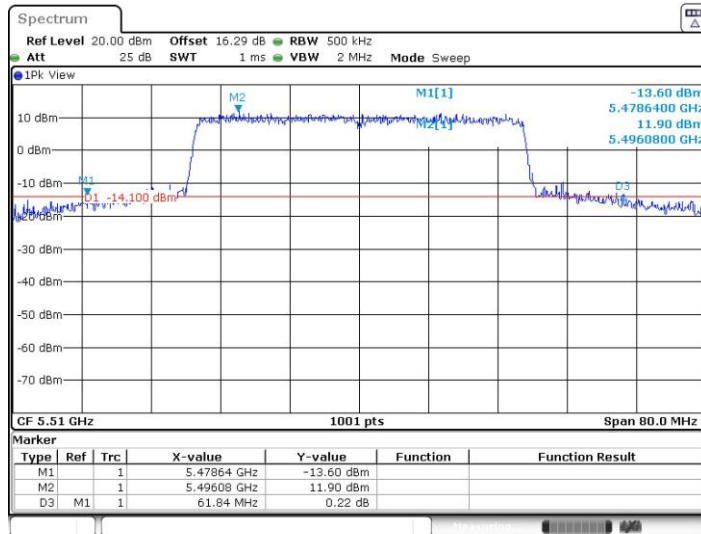
Date: 18.MAY.2022 05:13:22



11AX40MIMO_Ant1_5510

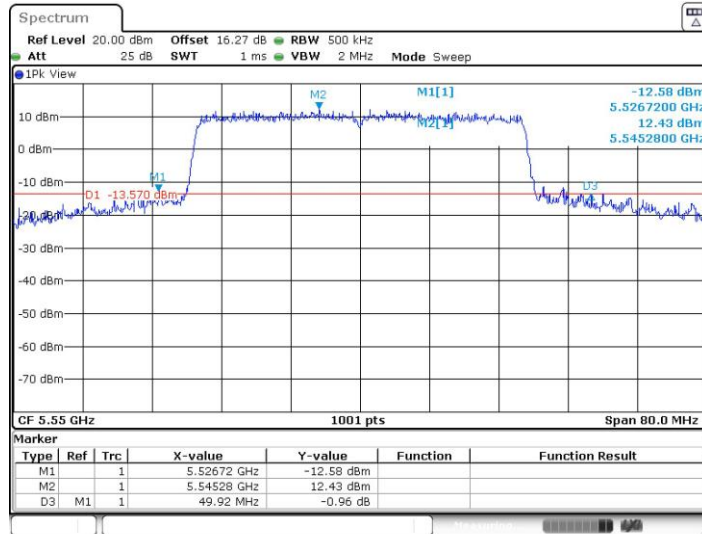


11AX40MIMO_Ant2_5510



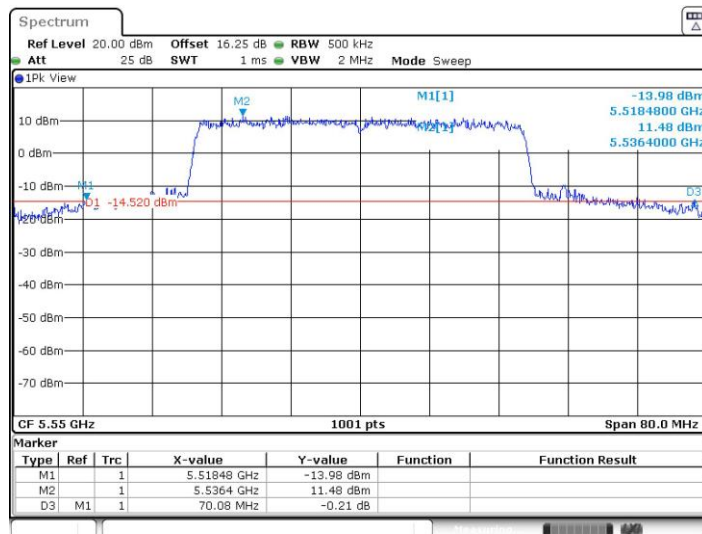


11AX40MIMO_Ant1_5550



Date: 18.MAY.2022 05:15:27

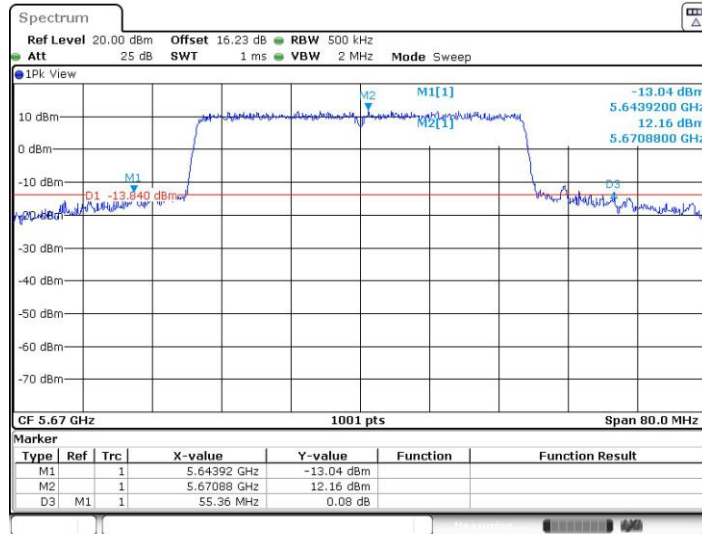
11AX40MIMO_Ant2_5550



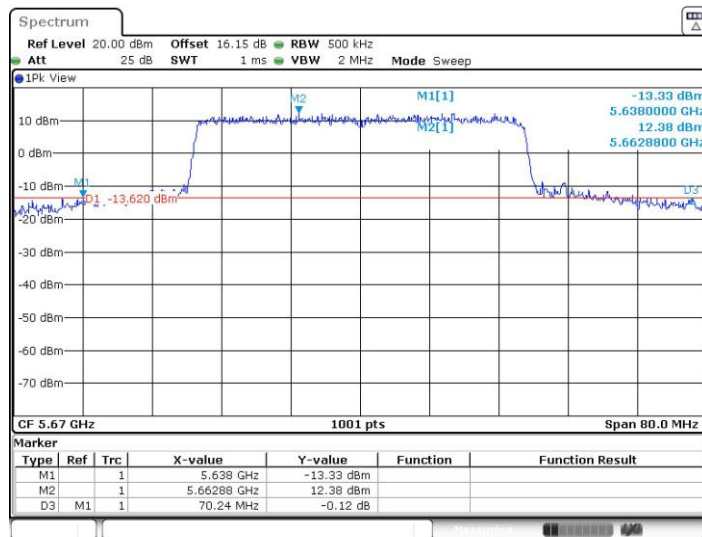
Date: 18.MAY.2022 05:15:57



11AX40MIMO_Ant1_5670

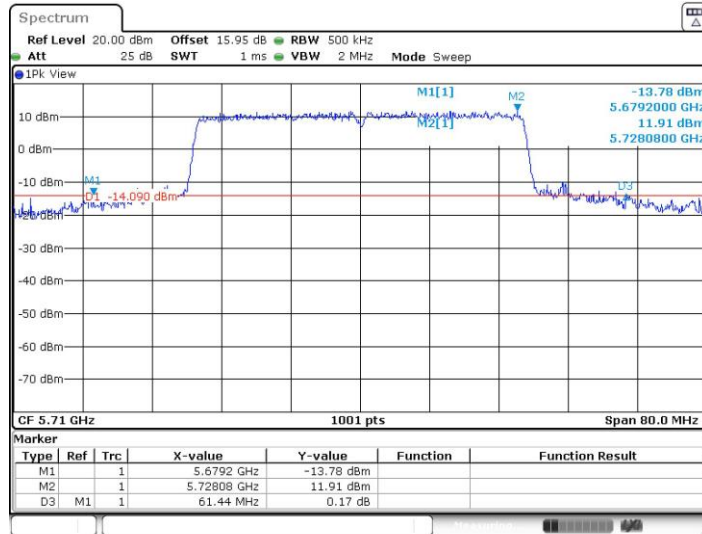


11AX40MIMO_Ant2_5670

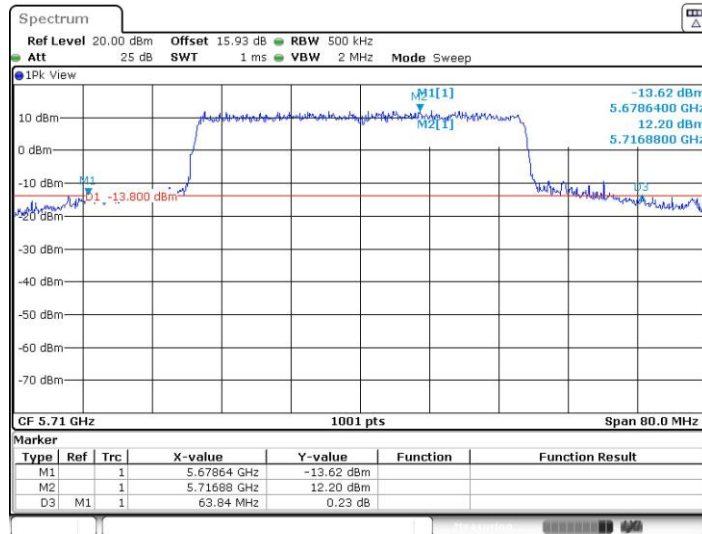




11AX40MIMO_Ant1_5710

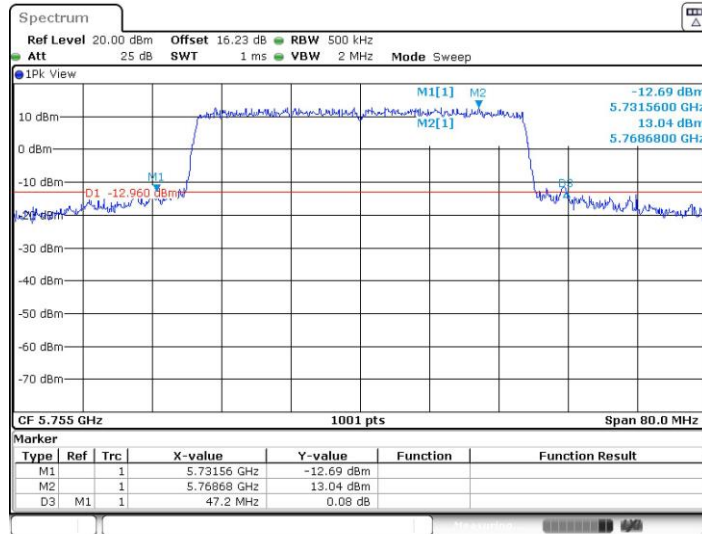


11AX40MIMO_Ant2_5710





11AX40MIMO_Ant1_5755



11AX40MIMO_Ant2_5755

