



FCC RF Test Report

FCC ID : UZ7ET4010B
EQUIPMENT : Enterprise Tablet
BRAND NAME : ZEBRA
MODEL NAME : ET4010B
APPLICANT : Zebra Technologies Corporation
3 Overlook Point, Lincolnshire, IL 60069 USA
MANUFACTURER : Zebra Technologies Corporation
3 Overlook Point, Lincolnshire, IL 60069 USA
STANDARD : FCC Part 15 Subpart E §15.407
CLASSIFICATION : 15E 6 GHz Low Power Dual Client (6CD)
(Indoor Low Power UNII-5/6/7/8)
TEST DATE(S) : Jul. 03, 2025 ~ Sep. 05, 2025

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



Table of Contents

1	General Description	5
1.1	Product Feature of Equipment Under Test.....	5
1.2	Product Specification of Equipment Under Test.....	6
1.3	Modification of EUT	9
1.4	Testing Location	9
1.5	Test Software.....	10
1.6	Applicable Standards.....	10
2	Test Configuration of Equipment Under Test	11
2.1	Carrier Frequency and Channel	11
2.2	Test Mode.....	14
2.3	Connection Diagram of Test System.....	16
2.4	Support Unit used in test configuration and system	17
2.5	EUT Operation Test Setup	17
2.6	Measurement Results Explanation Example.....	17
3	Test Result	18
3.1	26dB & 99% Occupied Bandwidth Measurement	18
3.2	Maximum conducted Output Power and Fundamental Maximum EIRP Measurement.....	19
3.3	Fundamental Power Spectral Density Measurement	29
3.4	In-Band Emissions (Channel Mask)	31
3.5	Contention Based Protocol.....	33
3.6	Unwanted Emissions Measurement	42
3.7	AC Conducted Emission Measurement.....	46
3.8	Antenna Requirements.....	48
4	List of Measuring Equipment.....	51
5	Measurement Uncertainty	52
Appendix A. Conducted Test Results		
Appendix B. AC Conducted Emission Test Result		
Appendix C. Radiated Spurious Emission		
Appendix D. Duty Cycle Plots		
Appendix E. Setup Photographs		



History of this test report

Report No.	Version	Description	Issued Date
FR550911F	01	Initial issue of report	Sep. 16, 2025

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.407(a)(11)	26dB Emission Bandwidth	Pass	-
3.1	2.1049	99% Occupied Bandwidth	Pass	-
3.2	15.407(a)(8)	Maximum Conducted Output Power	Reporting only	-
3.2	15.407(a)(8)	Fundamental Maximum EIRP	Pass	-
3.3	15.407(a)(8)	Fundamental Power Spectral Density	Pass	-
3.4	15.407(b)(7)	In-Band Emissions (Channel Mask)	Pass	-
3.5	15.407(d)(6)	Contention Based Protocol	Pass	
3.6	15.407(b)	Unwanted Emissions	Pass	Under limit 1.03 dB at 7125.00 MHz
3.7	15.207	AC Conducted Emission	Pass	Under limit 8.42 dB at 0.150 MHz
3.8	15.203 15.407(a)	Antenna Requirement	Pass	-

Conformity Assessment Condition:

- The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacture who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
- The measurement uncertainty please refer to each test result in the section "Measurement Uncertainty"

Disclaimer:

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.



1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
Equipment	Enterprise Tablet
Brand Name	ZEBRA
Model Name	ET4010B
FCC ID	UZ7ET4010B
SN Code	Conducted: 251345247E0032 Conduction: 251575247E0003 Radiation: 251575247E0019 for Sample 1 251575247E0006 for Sample 2 CBP: S251345247E0031
HW Version	EV1
SW Version	qssi_64-userdebug 15 15-07-16.00-VG-U00-PRD-ERS-04 210 release-keys
MFD	16JUL25
EUT Stage	Identical Prototype

Remark:

1. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.
2. There are two types of EUT: Sample 1 without Scanner and Sample 2 with Scanner. According to the difference, we chose sample 1 to perform full test and sample 2 to verify the worst cases.

Specification of Accessory				
Battery	Brand Name	Zebra	Model	BT-000528

Supported Unit used in test configuration and system				
AC Adapter 1 (TYPE C Wall Charger 1)	Brand Name	Zebra	Part Number	PWR-WUA5V45W1US
Earphone 1 (Wired headset USB-C)	Brand Name	Zebra	Part Number	HDST-USBC-PTT 1-01
Earphone 2 (Rugged Bluetooth Headset)	Brand Name	Zebra	Part Number	HS3100-0TH
Earphone 3 (3.5mm PTT Headset)	Brand Name	Zebra	Part Number	HDST-35MM-PTT 1-02
Earphone 4 (Rugged Headset)	Brand Name	Zebra	Part Number	HS2100-0TH
Earphone 5 (USB-C Wired Earbuds)	Brand Name	Avantree	Part Number	C171
Type C-Audio Cable (Type C to 3.5mm)	Brand Name	Zebra	Part Number	ADP-USBC-35MM1-01
3.5mm to 3.5mm audio connector	Brand Name	Zebra	Part Number	CBL-HS2100-3MS1-01
USB Cable 1 (USB-C to C Cable)	Brand Name	Zebra	Part Number	CBL-EC5X-USBC3A-01
USB Cable 2 (USB-A to C Cable)	Brand Name	Zebra	Part Number	CBL-TC5X-USBC2A-01
USB Cable 3 (USB-C to C Cable)	Brand Name	Zebra	Part Number	CBL-TN28-USBC2C-01

1.2 Product Specification of Equipment Under Test

Standards-related Product Specification														
Tx/Rx Frequency Range	U-NII-5: 5925 MHz ~ 6425 MHz U-NII-6: 6425 MHz ~ 6525 MHz U-NII-7: 6525 MHz ~ 6875 MHz U-NII-8: 6875 MHz ~ 7125 MHz													
Maximum EIRP	<MIMO Ant.6+7> <5925 MHz ~ 7125 MHz > 802.11a : 8.50 dBm / 0.0071 W 802.11ax HE20 : 11.90 dBm / 0.0155 W 802.11ax HE40 : 14.95 dBm / 0.0313 W 802.11ax HE80 : 17.76 dBm / 0.0597 W 802.11ax HE160 : 19.95 dBm / 0.0989 W 802.11be EHT20 : 11.94 dBm / 0.0156 W 802.11be EHT40 : 14.99 dBm / 0.0316 W 802.11be EHT80 : 17.79 dBm / 0.0601 W 802.11be EHT160 : 19.99 dBm / 0.0998 W 802.11be EHT320 : 22.60 dBm / 0.1820 W													
99% Occupied Bandwidth	802.11a : 17.972 MHz 802.11be EHT20 : 19.305 MHz 802.11be EHT40 : 38.458 MHz 802.11be EHT80 : 77.982 MHz 802.11be EHT160 : 159.619 MHz 802.11be EHT320 : 319.238 MHz													
Antenna Type / Gain	<5925 MHz ~ 6425 MHz > <Ant. 6>: IFA Antenna with gain -0.3 dBi <Ant. 7>: IFA Antenna with gain 1.01 dBi <6425 MHz ~ 6525 MHz > <Ant. 6>: IFA Antenna with gain -0.41 dBi <Ant. 7>: IFA Antenna with gain 0.02 dBi <6525 MHz ~ 6875 MHz > <Ant. 6>: IFA Antenna with gain 0.54 dBi <Ant. 7>: IFA Antenna with gain 0.23 dBi <6875 MHz ~ 7125 MHz > <Ant. 6>: IFA Antenna with gain -0.2 dBi <Ant. 7>: IFA Antenna with gain 0.01 dBi													
Type of Modulation	802.11a: OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11ax: OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM / 1024QAM) 802.11be: OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM / 1024QAM / 4096QAM)													
Antenna Function Description	<table border="1"> <thead> <tr> <th></th><th>Ant. 6</th><th>Ant. 7</th></tr> </thead> <tbody> <tr> <td>802.11 a/ax/be SISO</td><td>V</td><td>V</td></tr> <tr> <td>802.11 a/ax/be CDD</td><td colspan="2">V</td></tr> <tr> <td>802.11 ax/be SDM/TXBF</td><td colspan="2">V</td></tr> </tbody> </table>			Ant. 6	Ant. 7	802.11 a/ax/be SISO	V	V	802.11 a/ax/be CDD	V		802.11 ax/be SDM/TXBF	V	
	Ant. 6	Ant. 7												
802.11 a/ax/be SISO	V	V												
802.11 a/ax/be CDD	V													
802.11 ax/be SDM/TXBF	V													

Remark:

1. WIFI MIMO support CDD mode for 802.11a, and support CDD & SDM & TXBF mode for 802.11ax/be.

2. For WLAN SISO & MIMO(CDD) mode of 802.11a, the whole testing has assessed CDD mode by referring to the higher normal conducted power.
3. For WLAN SISO & MIMO(CDD) & MIMO(SDM) & MIMO(TXBF) mode of 802.11ax/be, SDM mode conducted power is set to 3dB higher than CDD/TXBF mode, since the maximum array gain for a two antennas system is 3dB, the whole testing has assessed SDM mode by referring to the higher output power.
4. For 802.11ax/be 20/40/80/160MHz mode, the whole testing has assessed only 802.11be EHT20/ EHT40/ EHT80/ EHT160MHz by referring to the higher output power.
5. 802.11ax/be 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 output power/PSD/Channel Mask in appendix A, the full RU power/PSD > partial RU, therefore the full RU perform full test, and partial RU verify bandedge/spurious.
6. The device does not support UNII-5 CH 2.
7. CBP test with antenna path of minimum gain (Antenna 6, Minimum gain= -0.41 dBi).
8. The device supports 1S2T (CDD&TXBF) and 2S2T (SDM) mode; 1S2T: Nss=1, MIMO 2Tx; 2S2T: Nss=2, MIMO 2Tx.
9. 802.11be support small size RU, Large size RU and Puncturing modes as below, which is less than full RU conducted power, therefore have assessed only Power Density/RSE.
10. For UNII-5/7, the RSE was tested using outdoor high power, so the indoor RSE are leveraged from outdoor report.

<Small size RU 52+26 Tone>:

Bandwidth	Tones		Index		For test modes configure
20MHz	26	52	1	38	1
20MHz	52	26	39	7	3

<Small size RU 106+26 Tone>:

Bandwidth	Tones		Index		For test modes configure
20MHz	106	26	53	4	1
20MHz	26	106	4	54	2

<Large size RU 484+242 tone> & <80M BW Puncturing 20MHz>:

Bandwidth	Tones		Index		For test modes configure
80MHz	242	484	62	66	1
80MHz	242	484	61	66	2
80MHz	484	242	65	64	3
80MHz	484	242	65	63	4

<Large size RU 996+484 tone> & <160M BW Puncturing 40MHz>:

Bandwidth	Tones		Index		For test modes configure
160MHz	484-Left	996-Right	66-Left	67-Right	1
160MHz	484-Left	996-Right	65-Left	67-Right	2
160MHz	996-Left	484-Right	67-Left	66-Right	3
160MHz	996-Left	484-Right	67-Left	65-Right	4

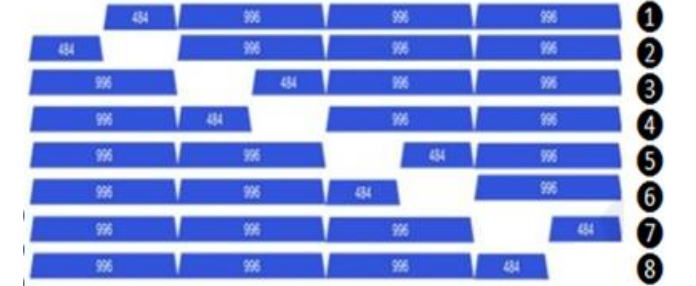
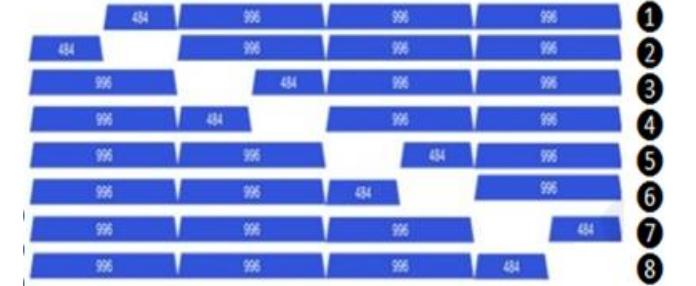
<160M BW Puncturing 20MHz>:

Bandwidth	Tones			Index			For test modes configure
160MHz	242-Left	484-Left	996-Right	62-Left	66-Left	67-Right	1
160MHz	242-Left	484-Left	996-Right	61-Left	66-Left	67-Right	2
160MHz	484-Left	242-Left	996-Right	65-Left	64-Left	67-Right	3
160MHz	484-Left	242-Left	996-Right	65-Left	63-Left	67-Right	4
160MHz	996-Left	242-Right	484-Right	67-Left	62-Right	66-Right	5
160MHz	996-Left	242-Right	484-Right	67-Left	61-Right	66-Right	6
160MHz	996-Left	484-Right	242-Right	67-Left	65-Right	64-Right	7
160MHz	996-Left	484-Right	242-Right	67-Left	65-Right	63-Right	8

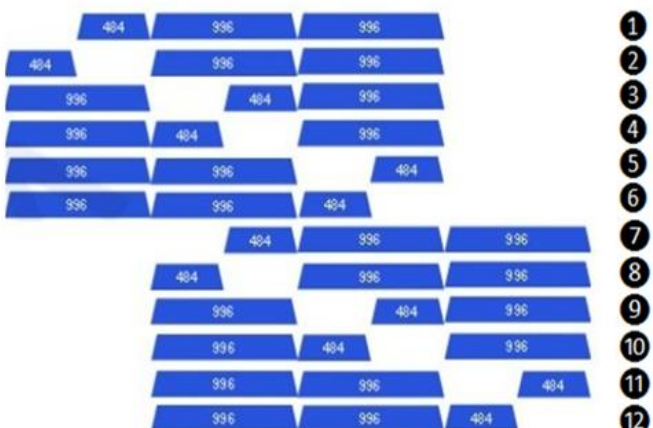
<Large size RU 3*996 tone> & <320M BW Puncturing 80MHz>:

Bandwidth	Tones	Index	For test modes configure
320MHz			1
			2
			3
			4

<Large size RU 3*996+484 tone> & <320M BW Puncturing 40MHz>:

Bandwidth	Tones	Index	For test modes configure
320MHz			1
			2
			3
			4
			5
			6
			7
			8

<Large size RU 2*996+484 tone> & <320M BW Puncturing 80+40MHz>:

Bandwidth	Tones	Index	For test modes configure
320MHz		1	1
		2	2
		3	3
		4	4
		5	5
		6	6
		7	7
		8	8
		9	9
		10	10
		11	11
		12	12

Only the worse cases are shown in this report.

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		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	CO01-KS 03CH05-KS TH01-KS DFS01-KS	CN1257	314309

1.5 Test Software

Item	Site	Manufacture	Name	Version
1.	03CH05-KS	AUDIX	E3	210616
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:

- ♦ FCC Part 15 Subpart E
- ♦ FCC KDB 987594 D02 U-NII 6 GHz EMC Measurement v03
- ♦ FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
- ♦ FCC KDB 414788 D01 Radiated Test Site v01r01.
- ♦ FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
- ♦ ANSI C63.10-2020

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 (Y plane) were recorded in this report.
- b. AC power line Conducted Emission was tested under maximum output power.

2.1 Carrier Frequency and Channel

<U-NII-5, 6, 7, 8>

BW 20M	Channel	1	5	9	13	17	21	25	29
	Freq. (MHz)	5955	5975	5995	6015	6035	6055	6075	6095
BW 40M	Channel	3		11		19		27	
	Freq. (MHz)	5965		6005		6045		6085	
BW 80M	Channel	7				23			
	Freq. (MHz)	5985				6065			
BW 160M	Channel	15							
	Freq. (MHz)	6025							

BW 20M	Channel	33	37	41	45	49	53	57	61
	Freq. (MHz)	6115	6135	6155	6175	6195	6215	6235	6255
BW 40M	Channel	35		43		51		59	
	Freq. (MHz)	6125		6165		6205		6245	
BW 80M	Channel	39				55			
	Freq. (MHz)	6145				6225			
BW 160M	Channel	47							
	Freq. (MHz)	6185							



BW 20M	Channel	65	69	73	77	81	85	89	93
	Freq. (MHz)	6275	6295	6315	6335	6355	6375	6395	6415
BW 40M	Channel	67		75		83		91	
	Freq. (MHz)	6285		6325		6365		6405	
BW 80M	Channel	71				87			
	Freq. (MHz)	6305				6385			
BW 160M	Channel	79							
	Freq. (MHz)	6345							
BW 320M	Channel	95							
	Freq. (MHz)	6425							

BW 20M	Channel	97	101	105	109	113	117	121	125
	Freq. (MHz)	6435	6455	6475	6495	6515	6535	6555	6575
BW 40M	Channel	99		107		115		123	
	Freq. (MHz)	6445		6485		6525		6565	
BW 80M	Channel	103				119			
	Freq. (MHz)	6465				6545			
BW 160M	Channel	111							
	Freq. (MHz)	6505							

BW 20M	Channel	129	133	137	141	145	149	153	157
	Freq. (MHz)	6595	6615	6635	6655	6675	6695	6715	6735
BW 40M	Channel	131		139		147		155	
	Freq. (MHz)	6605		6645		6685		6725	
BW 80M	Channel	135				151			
	Freq. (MHz)	6625				6705			
BW 160M	Channel	143							
	Freq. (MHz)	6665							
BW 320M	Channel	127							
	Freq. (MHz)	6585							



BW 20M	Channel	161	165	169	173	177	181	185	189
	Freq. (MHz)	6755	6775	6795	6815	6835	6855	6875	6895
BW 40M	Channel	163		171		179		187	
	Freq. (MHz)	6765		6805		6845		6885	
BW 80M	Channel	167				183			
	Freq. (MHz)	6785				6865			
BW 160M	Channel	175							
	Freq. (MHz)	6825							
BW 320M	Channel	159							
	Freq. (MHz)	6745							

BW 20M	Channel	193	197	201	205	209	213	217	221
	Freq. (MHz)	6915	6935	6955	6975	6995	7015	7035	7055
BW 40M	Channel	195		203		211		219	
	Freq. (MHz)	6925		6965		7005		7045	
BW 80M	Channel	199				215			
	Freq. (MHz)	6945				7025			
BW 160M	Channel	207							
	Freq. (MHz)	6985							
BW 320M	Channel	191							
	Freq. (MHz)	6905							

BW 20M	Channel	225	229	233
	Freq. (MHz)	7075	7095	7115
BW 40M	Channel	227		
	Freq. (MHz)	7085		

2.2 Test Mode

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

Modulation	Data Rate
802.11a	6 Mbps
802.11be EHT20	MCS0
802.11be EHT40	MCS0
802.11be EHT80	MCS0
802.11be EHT160	MCS0
802.11be EHT320	MCS0

Test Cases	
AC Conducted Emission	Mode 1 : WLAN 6G Link + Bluetooth Link + USB Cable 1 (CBL-EC5X-USBC3A-01) + AC Adapter 1 (PWR-WUA5V45W1US) + Battery (BT-000528)
Remark: For Radiated Test Cases, the tests were performed with Adapter1 and USB Cable1.	

RSE Co-location modes
WIFI 6G_11be EHT20 CH233_Tx_Ant 6+7 + WIFI 2.4G_11b CH01_Tx_Ant 7 + BLE 2M CH39_Tx_Ant 6 + NFC
WIFI 6G_11be EHT20 CH233_Tx_Ant 6+7 + WIFI 2.4G_11b CH01_Tx_Ant 6+7 + NFC
WIFI 6G_11be EHT20 CH233_Tx_Ant 6+7 + WIFI 5G_11be EHT160 CH50_Tx_Ant 6+7 + BLE 2M CH39_Tx_Ant 6 + NFC
WIFI 6G_11be EHT20 CH233_Tx_Ant 6+7 + WIFI 5G_11be EHT160 CH50_Tx_Ant 6+7 + BLE 2M CH39_Tx_Ant 7 + NFC

Ch. #		UNII-5	UNII-6	UNII-7	UNII-8
		20M BW	20M BW	20M BW	20M BW
L	Low	001	097	117	189
M	Middle	045	105	149	209
H	High	093	113	181	229/233
Straddle		-	-	-	185

Ch. #		UNII-5	UNII-6	UNII-7	UNII-8
		40M BW	40M BW	40M BW	40M BW
L	Low	003	099	123	195
M	Middle	043	-	147	203
H	High	091	107	179	227
Straddle		-	115	-	187

Ch. #		UNII-5	UNII-6	UNII-7	UNII-8
		80M BW	80M BW	80M BW	80M BW
L	Low	007	103	135	199
M	Middle	039		151	-
H	High	087		167	215
Straddle		-	119	183	-

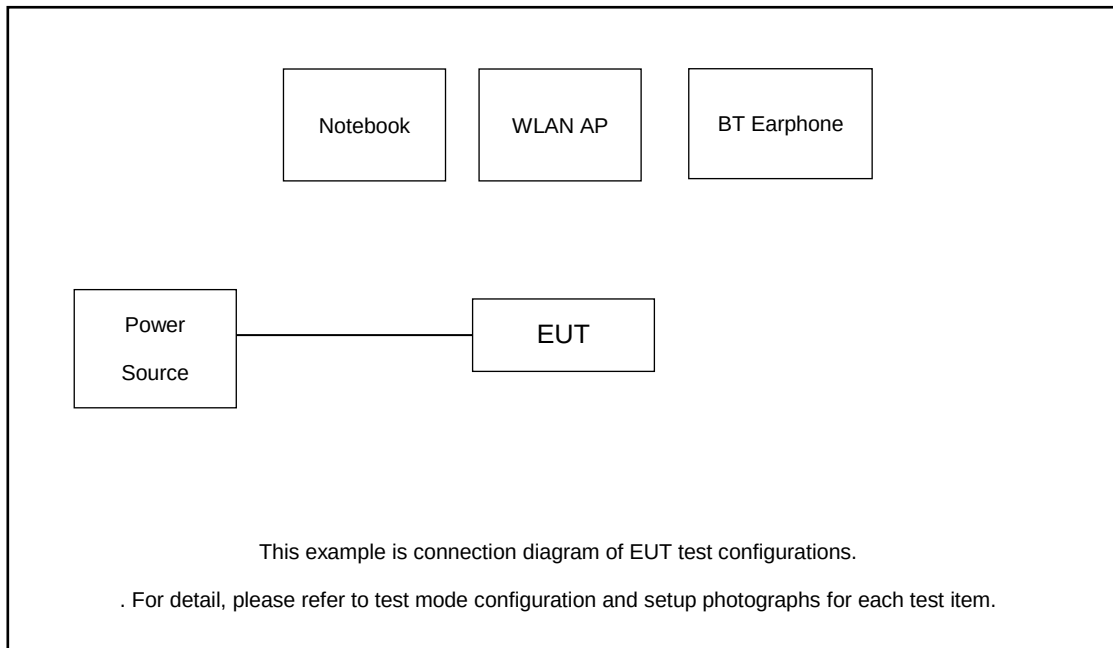
Ch. #		UNII-5	UNII-6	UNII-7	UNII-8
		160M BW	160M BW	160M BW	160M BW
L	Low	015	-	143	207
M	Middle	047			
H	High	079			
Straddle		-	111	175	-

Ch. #		UNII-5	UNII-6	UNII-7	UNII-8
		320M BW	320M BW	320M BW	320M BW
L	Low	-	-	-	-
M	Middle	031			
H	High	063			
Straddle		95	127	159	191

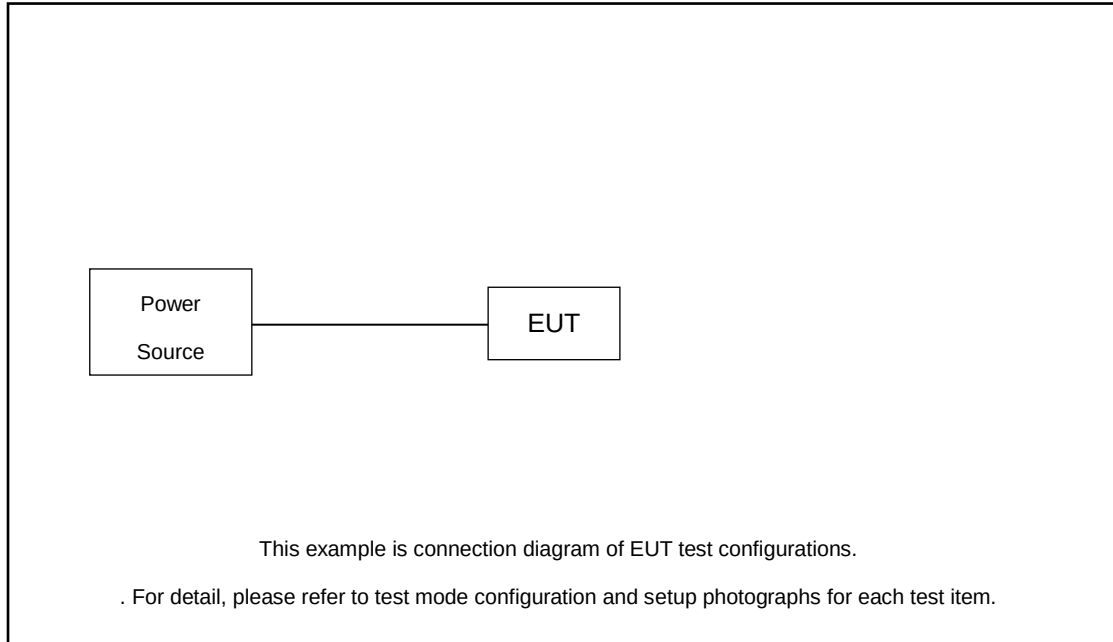
Remark: For radiation spurious emission, the final modulation and the worst data rate was reference the max RF conducted power.

2.3 Connection Diagram of Test System

AC Conducted Emission:



Radiated Emission:



2.4 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Notebook	Lenovo	G480	QDS-BRCM1050I	N/A	shielded cable DC O/P 1.8m , Unshielded AC I/P cable 1.8m
2.	WLAN AP	D-link	DIR-655	KA21R655B1	N/A	Unshielded,1.8m

2.5 EUT Operation Test Setup

For WLAN RF test items, an engineering test program (QRCT TX Tool) was provided and enabled to make EUT continuously transmit.

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.

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 5.88 dB and 20dB attenuator.

$$\begin{aligned}\text{Offset(dB)} &= \text{RF cable loss(dB)} + \text{attenuator factor(dB)} \\ &= 5.88 + 20 = 25.88 \text{ (dB)}\end{aligned}$$

3 Test Result

3.1 26dB & 99% Occupied Bandwidth Measurement

3.1.1 CFR 15.407 (a)(11)

The maximum transmitter channel bandwidth for U-NII devices in the 5.925-7.125 GHz band is 320 megahertz.

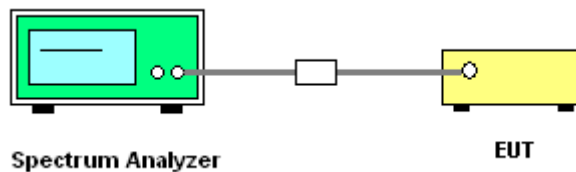
3.1.2 Measuring Instruments

See list of measuring equipment of this test report.

3.1.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section C) Emission bandwidth
2. Set RBW = approximately 1% of the emission bandwidth.
3. Set the VBW > RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. 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%.
7. For 99% Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) is set 1-5% of the emission bandwidth and set the Video bandwidth (VBW) $\geq 3 * RBW$.
8. Measure and record the results in the test report.

3.1.4 Test Setup



3.1.5 Test Result of 26dB & 99% Occupied Bandwidth

Please refer to Appendix A.

3.2 Maximum conducted Output Power and Fundamental Maximum EIRP Measurement

3.2.1 Limit of Fundamental Maximum EIRP

<FCC 14-30 CFR 15.407>

(a)(8) For client devices operating under the control of an indoor access point in the 5.925-7.125 GHz bands, the maximum e.i.r.p. over the frequency band of operation must not exceed 24 dBm.

3.2.2 Measuring Instruments

See list of measuring equipment of this test report.

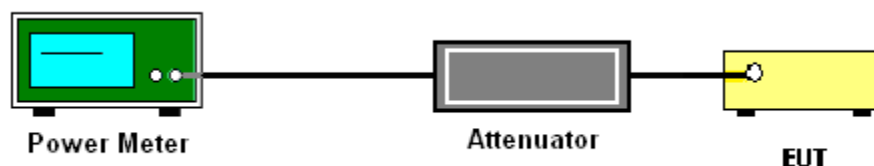
3.2.3 Test Procedures

The testing follows Method PM of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

Method PM (Measurement using an RF average power meter):

1. Measurement is performed using a wideband RF power meter.
2. The EUT is configured to transmit continuously with a consistent duty cycle at its maximum power control level.
3. Measure the average power of the transmitter, and the average power is corrected with duty factor, $10 \log(1/x)$, where x is the duty cycle.
4. For MIMO mode, the measure-and-sum technique should be used for measuring the in-band transmit power of a device.

3.2.4 Test Setup





3.2.5 Test Result of Fundamental Maximum EIRP

U-NII-5 MIMO TEST RESULTS DATA														
Average Output Power														
Mode							Power Setting	Average Conducted Power with duty factor(dBm)			Gain(dBi)	EIRP Power (dBm)	EIRP Power Limit (dBm)	Pass/Fail
Band	MIMO	N _{Tx}	Channel	Freq (MHz)	Data Rate	RU Config		Ant 6	Ant 7	Ant 6+7	Ant 6+7	Ant 6+7	Ant 6+7	
11a	CDD	2	1	5955	6Mbps	-	3.00	3.79	3.67	6.75	1.01	7.76	24	Pass
11a	CDD	2	49	6195	6Mbps	-	3.00	3.56	3.79	6.69	1.01	7.70	24	Pass
11a	CDD	2	93	6415	6Mbps	-	4.00	4.29	4.05	7.19	1.01	8.20	24	Pass
HE20	SDM	2	1	5955	MCS0	Full	7.00	7.22	7.75	10.50	1.01	11.51	24	Pass
HE20	SDM	2	1	5955	MCS0	RU 26/0	-2.50	-2.10	-1.25	1.36	1.01	2.37	24	Pass
HE20	SDM	2	1	5955	MCS0	RU 52/37	0.00	0.37	0.96	3.69	1.01	4.70	24	Pass
HE20	SDM	2	1	5955	MCS0	RU 106/53	3.00	4.34	4.18	7.27	1.01	8.28	24	Pass
HE20	SDM	2	49	6195	MCS0	Full	7.00	6.94	7.67	10.33	1.01	11.34	24	Pass
HE20	SDM	2	49	6195	MCS0	RU 26/0	-4.50	-3.67	-2.98	-0.30	1.01	0.71	24	Pass
HE20	SDM	2	49	6195	MCS0	RU 52/37	-1.50	-0.95	-0.31	2.39	1.01	3.40	24	Pass
HE20	SDM	2	49	6195	MCS0	RU 106/53	2.50	2.43	2.81	5.63	1.01	6.64	24	Pass
HE20	SDM	2	93	6415	MCS0	Full	7.50	7.21	7.89	10.57	1.01	11.58	24	Pass
HE20	SDM	2	93	6415	MCS0	RU 26/8	-3.00	-2.12	-1.66	1.13	1.01	2.14	24	Pass
HE20	SDM	2	93	6415	MCS0	RU 52/40	-0.50	0.28	0.64	3.47	1.01	4.48	24	Pass
HE20	SDM	2	93	6415	MCS0	RU 106/54	3.00	4.20	3.67	6.95	1.01	7.96	24	Pass
HE40	SDM	2	3	5965	MCS0	Full	9.50	10.32	9.95	13.15	1.01	14.16	24	Pass
HE40	SDM	2	3	5965	MCS0	RU 242/61	6.50	7.39	6.96	10.19	1.01	11.20	24	Pass
HE40	SDM	2	51	6205	MCS0	Full	9.50	10.18	10.19	13.20	1.01	14.21	24	Pass
HE40	SDM	2	51	6205	MCS0	RU 242/61	5.00	6.05	5.74	8.91	1.01	9.92	24	Pass
HE40	SDM	2	91	6405	MCS0	Full	10.50	10.65	10.72	13.70	1.01	14.71	24	Pass
HE40	SDM	2	91	6405	MCS0	RU 242/62	6.50	6.70	7.33	10.04	1.01	11.05	24	Pass
HE80	SDM	2	7	5985	MCS0	Full	12.50	13.28	12.85	16.08	1.01	17.09	24	Pass
HE80	SDM	2	7	5985	MCS0	RU 484/65	9.00	10.52	9.95	13.26	1.01	14.27	24	Pass
HE80	SDM	2	55	6225	MCS0	Full	12.50	12.99	13.15	16.08	1.01	17.09	24	Pass
HE80	SDM	2	55	6225	MCS0	RU 484/65	7.50	8.03	8.54	11.31	1.01	12.32	24	Pass
HE80	SDM	2	87	6385	MCS0	Full	13.00	13.17	13.26	16.23	1.01	17.24	24	Pass
HE80	SDM	2	87	6385	MCS0	RU 484/66	9.00	7.69	8.18	10.96	1.01	11.97	24	Pass
HE160	SDM	2	15	6025	MCS0	Full	15.50	15.85	15.32	18.60	1.01	19.61	24	Pass
HE160	SDM	2	15	6025	MCS0	RU 996/67	11.50	12.69	11.90	15.33	1.01	16.34	24	Pass
HE160	SDM	2	47	6185	MCS0	Full	15.50	15.33	15.55	18.45	1.01	19.46	24	Pass
HE160	SDM	2	47	6185	MCS0	RU 996/67	11.00	11.85	11.70	14.79	1.01	15.80	24	Pass
HE160	SDM	2	79	6345	MCS0	Full	16.00	15.76	15.71	18.75	1.01	19.76	24	Pass
HE160	SDM	2	79	6345	MCS0	RU 996/S67	11.50	12.08	11.84	14.98	1.01	15.99	24	Pass
EHT20	SDM	2	1	5955	MCS0	Full	7.00	7.25	7.80	10.54	1.01	11.55	24	Pass
EHT20	SDM	2	1	5955	MCS0	RU 26/0	-2.50	-2.06	-1.21	1.40	1.01	2.41	24	Pass
EHT20	SDM	2	1	5955	MCS0	RU 52/37	0.00	0.44	1.04	3.76	1.01	4.77	24	Pass
EHT20	SDM	2	1	5955	MCS0	RU 106/53	3.00	4.41	4.22	7.33	1.01	8.34	24	Pass
EHT20	SDM	2	1	5955	MCS0	RU 52+26	0.00	0.17	0.72	3.46	1.01	4.47	24	Pass
EHT20	SDM	2	1	5955	MCS0	RU 106+26	3.00	4.43	4.15	7.30	1.01	8.31	24	Pass
EHT20	SDM	2	49	6195	MCS0	Full	7.00	6.96	7.70	10.36	1.01	11.37	24	Pass



EHT20	SDM	2	49	6195	MCS0	RU 26/0	-4.50	-3.59	-2.91	-0.23	1.01	0.78	24	Pass
EHT20	SDM	2	49	6195	MCS0	RU 52/37	-1.50	-0.87	-0.26	2.46	1.01	3.47	24	Pass
EHT20	SDM	2	49	6195	MCS0	RU 106/53	2.50	2.46	2.87	5.68	1.01	6.69	24	Pass
EHT20	SDM	2	93	6415	MCS0	Full	7.50	7.24	7.93	10.61	1.01	11.62	24	Pass
EHT20	SDM	2	93	6415	MCS0	RU 26/8	-3.00	-2.06	-1.61	1.18	1.01	2.19	24	Pass
EHT20	SDM	2	93	6415	MCS0	RU 52/40	-0.50	0.31	0.68	3.51	1.01	4.52	24	Pass
EHT20	SDM	2	93	6415	MCS0	RU 106/54	3.00	4.26	3.72	7.01	1.01	8.02	24	Pass
EHT40	SDM	2	3	5965	MCS0	Full	9.50	10.35	9.99	13.18	1.01	14.19	24	Pass
EHT40	SDM	2	3	5965	MCS0	RU 242/61	6.50	7.42	7.00	10.23	1.01	11.24	24	Pass
EHT40	SDM	2	51	6205	MCS0	Full	9.50	10.22	10.24	13.24	1.01	14.25	24	Pass
EHT40	SDM	2	51	6205	MCS0	RU 242/61	5.00	6.08	5.79	8.95	1.01	9.96	24	Pass
EHT40	SDM	2	91	6405	MCS0	Full	10.50	10.67	10.75	13.72	1.01	14.73	24	Pass
EHT40	SDM	2	91	6405	MCS0	RU 242/62	6.50	6.73	7.37	10.07	1.01	11.08	24	Pass
EHT80	SDM	2	7	5985	MCS0	Full	12.50	13.31	12.89	16.12	1.01	17.13	24	Pass
EHT80	SDM	2	7	5985	MCS0	RU 484/65	9.00	10.56	10.00	13.30	1.01	14.31	24	Pass
EHT80	SDM	2	7	5985	MCS0	PC 20,Loc:4	10.25	10.61	9.89	13.28	1.01	14.29	24	Pass
EHT80	SDM	2	7	5985	MCS0	Large 484+242,Loc:4	10.50	11.87	11.40	14.65	1.01	15.66	24	Pass
EHT80	SDM	2	55	6225	MCS0	Full	12.50	13.03	13.18	16.12	1.01	17.13	24	Pass
EHT80	SDM	2	55	6225	MCS0	RU 484/65	7.50	8.10	8.62	11.38	1.01	12.39	24	Pass
EHT80	SDM	2	87	6385	MCS0	Full	13.00	13.20	13.30	16.26	1.01	17.27	24	Pass
EHT80	SDM	2	87	6385	MCS0	RU 484/66	9.00	7.75	8.26	11.03	1.01	12.04	24	Pass
EHT160	SDM	2	15	6025	MCS0	Full	15.50	15.91	15.38	18.66	1.01	19.67	24	Pass
EHT160	SDM	2	15	6025	MCS0	RU 996/67	11.50	12.74	11.98	15.39	1.01	16.40	24	Pass
EHT160	SDM	2	15	6025	MCS0	PC 20,Loc:8	14.00	15.04	14.34	17.71	1.01	18.72	24	Pass
EHT160	SDM	2	15	6025	MCS0	PC 40,Loc:4	13.50	14.68	13.97	17.35	1.01	18.36	24	Pass
EHT160	SDM	2	15	6025	MCS0	Large 996+484+242,Loc:8	13.50	14.63	13.85	17.27	1.01	18.28	24	Pass
EHT160	SDM	2	15	6025	MCS0	Large 996+484,Loc:4	13.00	14.24	13.49	16.89	1.01	17.90	24	Pass
EHT160	SDM	2	47	6185	MCS0	Full	15.50	15.35	15.59	18.48	1.01	19.49	24	Pass
EHT160	SDM	2	47	6185	MCS0	RU 996/67	11.00	11.90	11.78	14.86	1.01	15.87	24	Pass
EHT160	SDM	2	79	6345	MCS0	Full	16.00	15.77	15.75	18.77	1.01	19.78	24	Pass
EHT160	SDM	2	79	6345	MCS0	RU 996/S67	11.50	12.14	11.92	15.05	1.01	16.06	24	Pass
EHT320	SDM	2	31	6105	MCS0	Full	18.50	18.83	18.32	21.59	1.01	22.60	24	Pass
EHT320	SDM	2	31	6105	MCS0	RU966*2/69	14.50	15.25	14.77	18.03	1.01	19.04	24	Pass
EHT320	SDM	2	31	6105	MCS0	PC 40,Loc:8	17.50	17.71	17.52	20.63	1.01	21.64	24	Pass
EHT320	SDM	2	31	6105	MCS0	PC 80,Loc:4	16.25	16.35	16.12	19.25	1.01	20.26	24	Pass
EHT320	SDM	2	31	6105	MCS0	PC 80+40,Loc:6	14.50	15.29	14.77	18.05	1.01	19.06	24	Pass
EHT320	SDM	2	31	6105	MCS0	Large 996*3+484,Loc:8	17.00	17.00	16.88	19.95	1.01	20.96	24	Pass
EHT320	SDM	2	31	6105	MCS0	Large 996*3,Loc:4	16.50	16.78	16.65	19.72	1.01	20.73	24	Pass
EHT320	SDM	2	31	6105	MCS0	Large 996*2+484,Loc:6	15.50	15.85	15.54	18.71	1.01	19.72	24	Pass
EHT320	SDM	2	63	6265	MCS0	Full	17.50	17.71	18.05	20.89	1.01	21.90	24	Pass
EHT320	SDM	2	63	6265	MCS0	RU966*2/69	13.50	14.28	14.19	17.25	1.01	18.26	24	Pass
EHT320	SDM	2	95	6425	MCS0	Full	18.00	18.33	18.38	21.37	1.01	22.38	24	Pass
EHT320	SDM	2	95	6425	MCS0	RU966*2/70	15.00	15.08	15.47	18.29	1.01	19.30	24	Pass



U-NII-6 MIMO TEST RESULTS DATA														
Average Output Power														
Mode							Power Setting	Average Conducted Power with duty factor(dBm)			Gain(dBi)	EIRP Power (dBm)	EIRP Power Limit (dBm)	Pass/Fail
Band	MIMO	N _{TX}	Channel	Freq (MHz)	Data Rate	RU Config		Ant 6	Ant 7	Ant 6+7	Ant 6+7	Ant 6+7	Ant 6+7	
11a	CDD	2	97	6435	6Mbps	-	4.50	4.68	4.95	7.83	0.02	7.85	24	Pass
11a	CDD	2	105	6475	6Mbps	-	4.50	4.75	5.02	7.90	0.02	7.92	24	Pass
11a	CDD	2	113	6515	6Mbps	-	4.50	4.89	4.56	7.74	0.02	7.76	24	Pass
HE20	SDM	2	97	6435	MCS0	Full	7.50	7.15	7.91	10.56	0.02	10.58	24	Pass
HE20	SDM	2	97	6435	MCS0	RU 26/0	-3.00	-2.16	-1.86	1.00	0.02	1.02	24	Pass
HE20	SDM	2	97	6435	MCS0	RU 52/37	0.50	0.93	0.79	3.87	0.02	3.89	24	Pass
HE20	SDM	2	97	6435	MCS0	RU 106/53	3.00	4.01	3.93	6.98	0.02	7.00	24	Pass
HE20	SDM	2	105	6475	MCS0	Full	8.00	8.49	8.45	11.48	0.02	11.50	24	Pass
HE20	SDM	2	105	6475	MCS0	RU 26/0	-2.50	-1.33	-1.70	1.50	0.02	1.52	24	Pass
HE20	SDM	2	105	6475	MCS0	RU 52/37	0.50	1.26	0.67	3.99	0.02	4.01	24	Pass
HE20	SDM	2	105	6475	MCS0	RU 106/53	3.50	4.35	4.49	7.43	0.02	7.45	24	Pass
HE20	SDM	2	113	6515	MCS0	Full	8.00	8.42	8.44	11.44	0.02	11.46	24	Pass
HE20	SDM	2	113	6515	MCS0	RU 26/8	-2.50	-1.24	-1.35	1.72	0.02	1.74	24	Pass
HE20	SDM	2	113	6515	MCS0	RU 52/40	0.50	1.44	0.89	4.18	0.02	4.20	24	Pass
HE20	SDM	2	113	6515	MCS0	RU 106/54	3.50	4.69	4.16	7.44	0.02	7.46	24	Pass
HE40	SDM	2	99	6445	MCS0	Full	11.00	11.28	11.39	14.35	0.02	14.37	24	Pass
HE40	SDM	2	99	6445	MCS0	RU 242/61	7.00	7.18	7.79	10.51	0.02	10.53	24	Pass
HE40	SDM	2	107	6485	MCS0	Full	11.00	11.44	11.45	14.46	0.02	14.48	24	Pass
HE40	SDM	2	107	6485	MCS0	RU 242/61	6.50	6.83	7.69	10.29	0.02	10.31	24	Pass
HE40	SDM	2	115	6525	MCS0	Full	10.00	10.52	10.43	13.49	0.02	13.51	24	Pass
HE40	SDM	2	115	6525	MCS0	RU 242/62	6.00	6.19	6.99	9.62	0.02	9.64	24	Pass
HE80	SDM	2	103	6465	MCS0	Full	14.00	14.23	14.34	17.30	0.02	17.32	24	Pass
HE80	SDM	2	103	6465	MCS0	RU 484/65	9.50	10.39	9.92	13.18	0.02	13.20	24	Pass
HE80	SDM	2	119	6545	MCS0	Full	13.00	13.33	13.42	16.39	0.02	16.41	24	Pass
HE80	SDM	2	119	6545	MCS0	RU 484/65	9.00	9.53	9.41	12.48	0.02	12.50	24	Pass
HE160	SDM	2	111	6505	MCS0	Full	16.50	16.11	16.23	19.18	0.02	19.20	24	Pass
HE160	SDM	2	111	6505	MCS0	RU 996/67	12.00	12.74	12.42	15.60	0.02	15.62	24	Pass
EHT20	SDM	2	97	6435	MCS0	Full	7.50	7.17	7.93	10.58	0.02	10.60	24	Pass
EHT20	SDM	2	97	6435	MCS0	RU 26/0	-3.00	-2.12	-1.83	1.04	0.02	1.06	24	Pass
EHT20	SDM	2	97	6435	MCS0	RU 52/37	0.50	0.97	0.86	3.93	0.02	3.95	24	Pass
EHT20	SDM	2	97	6435	MCS0	RU 106/53	3.00	4.10	3.98	7.05	0.02	7.07	24	Pass
EHT20	SDM	2	97	6435	MCS0	RU 52+26	0.50	0.68	0.72	3.71	0.02	3.73	24	Pass
EHT20	SDM	2	97	6435	MCS0	RU 106+26	3.00	3.89	3.87	6.89	0.02	6.91	24	Pass
EHT20	SDM	2	105	6475	MCS0	Full	8.00	8.52	8.48	11.51	0.02	11.53	24	Pass
EHT20	SDM	2	105	6475	MCS0	RU 26/0	-2.50	-1.24	-1.62	1.58	0.02	1.60	24	Pass
EHT20	SDM	2	105	6475	MCS0	RU 52/37	0.50	1.31	0.74	4.04	0.02	4.06	24	Pass
EHT20	SDM	2	105	6475	MCS0	RU 106/53	3.50	4.39	4.53	7.47	0.02	7.49	24	Pass
EHT20	SDM	2	113	6515	MCS0	Full	8.00	8.45	8.47	11.47	0.02	11.49	24	Pass
EHT20	SDM	2	113	6515	MCS0	RU 26/8	-2.50	-1.16	-1.28	1.79	0.02	1.81	24	Pass
EHT20	SDM	2	113	6515	MCS0	RU 52/40	0.50	1.47	0.94	4.22	0.02	4.24	24	Pass



EHT20	SDM	2	113	6515	MCS0	RU 106/54	3.50	4.78	4.19	7.51	0.02	7.53	24	Pass
EHT40	SDM	2	99	6445	MCS0	Full	11.00	11.32	11.41	14.38	0.02	14.40	24	Pass
EHT40	SDM	2	99	6445	MCS0	RU 242/61	7.00	7.23	7.88	10.58	0.02	10.60	24	Pass
EHT40	SDM	2	107	6485	MCS0	Full	11.00	11.48	11.47	14.49	0.02	14.51	24	Pass
EHT40	SDM	2	107	6485	MCS0	RU 242/61	6.50	6.91	7.77	10.37	0.02	10.39	24	Pass
EHT40	SDM	2	115	6525	MCS0	Full	10.00	10.55	10.48	13.53	0.02	13.55	24	Pass
EHT40	SDM	2	115	6525	MCS0	RU 242/62	6.00	6.28	7.08	9.71	0.02	9.73	24	Pass
EHT80	SDM	2	103	6465	MCS0	Full	14.00	14.25	14.38	17.33	0.02	17.35	24	Pass
EHT80	SDM	2	103	6465	MCS0	RU 484/65	9.50	10.43	10.01	13.24	0.02	13.26	24	Pass
EHT80	SDM	2	103	6465	MCS0	PC 20,Loc:4	11.75	12.54	12.33	15.45	0.02	15.47	24	Pass
EHT80	SDM	2	103	6465	MCS0	Large 484+242,Loc:4	11.50	12.36	11.95	15.17	0.02	15.19	24	Pass
EHT80	SDM	2	119	6545	MCS0	Full	13.00	13.35	13.48	16.43	0.02	16.45	24	Pass
EHT80	SDM	2	119	6545	MCS0	RU 484/66	9.00	9.59	9.48	12.55	0.02	12.57	24	Pass
EHT160	SDM	2	111	6505	MCS0	Full	16.50	16.13	16.29	19.22	0.02	19.24	24	Pass
EHT160	SDM	2	111	6505	MCS0	RU 996/67	12.00	12.77	12.51	15.66	0.02	15.68	24	Pass
EHT160	SDM	2	111	6505	MCS0	PC 20,Loc:8	15.00	15.53	15.28	18.42	0.02	18.44	24	Pass
EHT160	SDM	2	111	6505	MCS0	PC 40,Loc:4	14.00	14.53	14.34	17.45	0.02	17.47	24	Pass
EHT160	SDM	2	111	6505	MCS0	Large 996+484+242,Loc:8	14.50	14.97	14.86	17.93	0.02	17.95	24	Pass
EHT160	SDM	2	111	6505	MCS0	Large 996+484,Loc:4	13.50	14.11	13.96	17.04	0.02	17.06	24	Pass
EHT320	SDM	2	127	6585	MCS0	Full	18.50	18.85	18.70	21.79	0.02	21.81	24	Pass
EHT320	SDM	2	127	6585	MCS0	RU 2*996/69	14.50	15.00	15.02	18.02	0.02	18.04	24	Pass
EHT320	SDM	2	127	6585	MCS0	PC 40,Loc:8	17.00	17.21	17.56	20.40	0.02	20.42	24	Pass
EHT320	SDM	2	127	6585	MCS0	PC 80,Loc:4	15.75	15.77	15.84	18.82	0.02	18.84	24	Pass
EHT320	SDM	2	127	6585	MCS0	PC 80+40,Loc:6	14.00	14.58	14.68	17.64	0.02	17.66	24	Pass
EHT320	SDM	2	127	6585	MCS0	Large 996*3+484,Loc:8	17.00	17.01	17.40	20.22	0.02	20.24	24	Pass
EHT320	SDM	2	127	6585	MCS0	Large 996*3,Loc:4	16.50	16.47	16.97	19.74	0.02	19.76	24	Pass
EHT320	SDM	2	127	6585	MCS0	Large 996*2+484,Loc:6	15.50	15.55	15.81	18.69	0.02	18.71	24	Pass



U-NII-7 MIMO TEST RESULTS DATA														
Average Output Power														
Mode							Power Setting	Average Conducted Power with duty factor(dBm)			Gain(dBi)	EIRP Power (dBm)	EIRP Power Limit (dBm)	Pass/Fail
Band	MIMO	N _{TX}	Channel	Freq (MHz)	Data Rate	RU Config		Ant 6	Ant 7	Ant 6+7	Ant 6+7	Ant 6+7	Ant 6+7	
11a	CDD	2	117	6535	6Mbps	-	4.00	4.54	4.30	7.44	0.54	7.98	24	Pass
11a	CDD	2	149	6695	6Mbps	-	4.50	4.35	4.96	7.68	0.54	8.22	24	Pass
11a	CDD	2	181	6855	6Mbps	-	5.00	4.52	5.05	7.81	0.54	8.35	24	Pass
11a	CDD	2	185	6875	6Mbps	-	4.50	4.13	4.71	7.44	0.54	7.98	24	Pass
HE20	SDM	2	117	6535	MCS0	Full	7.50	8.28	8.09	11.20	0.54	11.74	24	Pass
HE20	SDM	2	117	6535	MCS0	RU 26/0	-2.50	-1.91	-1.64	1.24	0.54	1.78	24	Pass
HE20	SDM	2	117	6535	MCS0	RU 52/37	0.50	1.03	0.80	3.93	0.54	4.47	24	Pass
HE20	SDM	2	117	6535	MCS0	RU 106/53	3.00	4.02	3.77	6.91	0.54	7.45	24	Pass
HE20	SDM	2	149	6695	MCS0	Full	7.50	7.84	8.28	11.08	0.54	11.62	24	Pass
HE20	SDM	2	149	6695	MCS0	RU 26/0	-3.00	-2.05	-1.51	1.24	0.54	1.78	24	Pass
HE20	SDM	2	149	6695	MCS0	RU 52/37	-0.50	0.34	0.67	3.52	0.54	4.06	24	Pass
HE20	SDM	2	149	6695	MCS0	RU 106/53	2.50	3.41	4.03	6.74	0.54	7.28	24	Pass
HE20	SDM	2	181	6855	MCS0	Full	8.00	8.14	8.55	11.36	0.54	11.90	24	Pass
HE20	SDM	2	181	6855	MCS0	RU 26/8	-3.50	-2.40	-1.99	0.82	0.54	1.36	24	Pass
HE20	SDM	2	181	6855	MCS0	RU 52/40	-1.00	-0.19	0.24	3.04	0.54	3.58	24	Pass
HE20	SDM	2	181	6855	MCS0	RU 106/54	3.00	3.59	3.54	6.58	0.54	7.12	24	Pass
HE20	SDM	2	185	6875	MCS0	Full	8.00	7.99	8.54	11.28	0.54	11.82	24	Pass
HE20	SDM	2	185	6875	MCS0	RU 26/8	-3.00	-2.01	-1.57	1.23	0.54	1.77	24	Pass
HE20	SDM	2	185	6875	MCS0	RU 52/40	-0.50	0.49	0.76	3.64	0.54	4.18	24	Pass
HE20	SDM	2	185	6875	MCS0	RU 106/54	3.50	3.98	4.05	7.03	0.54	7.57	24	Pass
HE40	SDM	2	123	6565	MCS0	Full	10.00	10.42	10.58	13.51	0.54	14.05	24	Pass
HE40	SDM	2	123	6565	MCS0	RU 242/61	5.50	5.82	6.11	8.98	0.54	9.52	24	Pass
HE40	SDM	2	147	6685	MCS0	Full	10.00	10.35	10.81	13.60	0.54	14.14	24	Pass
HE40	SDM	2	147	6685	MCS0	RU 242/61	5.50	5.82	7.18	9.56	0.54	10.10	24	Pass
HE40	SDM	2	179	6845	MCS0	Full	11.00	11.24	11.56	14.41	0.54	14.95	24	Pass
HE40	SDM	2	179	6845	MCS0	RU 242/62	6.00	6.91	7.17	10.05	0.54	10.59	24	Pass
HE40	SDM	2	187	6885	MCS0	Full	11.00	11.22	11.47	14.36	0.54	14.90	24	Pass
HE40	SDM	2	187	6885	MCS0	RU 242/62	5.50	5.45	6.93	9.26	0.54	9.80	24	Pass
HE80	SDM	2	135	6625	MCS0	Full	13.50	13.75	14.11	16.94	0.54	17.48	24	Pass
HE80	SDM	2	135	6625	MCS0	RU 484/65	9.00	10.10	9.77	12.95	0.54	13.49	24	Pass
HE80	SDM	2	151	6705	MCS0	Full	13.50	13.71	14.22	16.98	0.54	17.52	24	Pass
HE80	SDM	2	151	6705	MCS0	RU 484/65	9.00	9.78	9.90	12.85	0.54	13.39	24	Pass
HE80	SDM	2	167	6785	MCS0	Full	13.50	13.54	14.07	16.82	0.54	17.36	24	Pass
HE80	SDM	2	167	6785	MCS0	RU 484/66	9.00	9.63	9.66	12.66	0.54	13.20	24	Pass
HE80	SDM	2	183	6865	MCS0	Full	14.00	14.03	14.38	17.22	0.54	17.76	24	Pass
HE80	SDM	2	183	6865	MCS0	RU 484/66	9.50	9.96	10.04	13.01	0.54	13.55	24	Pass
HE160	SDM	2	143	6665	MCS0	Full	16.50	16.17	16.61	19.41	0.54	19.95	24	Pass
HE160	SDM	2	143	6665	MCS0	RU 996/67	12.00	12.40	12.62	15.53	0.54	16.07	24	Pass
HE160	SDM	2	175	6825	MCS0	Full	16.50	15.95	16.53	19.26	0.54	19.80	24	Pass
HE160	SDM	2	175	6825	MCS0	RU 996/67	12.00	12.46	12.60	15.55	0.54	16.09	24	Pass



EHT20	SDM	2	117	6535	MCS0	Full	7.50	8.32	8.12	11.23	0.54	11.77	24	Pass
EHT20	SDM	2	117	6535	MCS0	RU 26/0	-2.50	-1.87	-1.62	1.27	0.54	1.81	24	Pass
EHT20	SDM	2	117	6535	MCS0	RU 52/37	0.50	1.09	0.89	4.00	0.54	4.54	24	Pass
EHT20	SDM	2	117	6535	MCS0	RU 106/53	3.00	4.08	3.81	6.96	0.54	7.50	24	Pass
EHT20	SDM	2	117	6535	MCS0	RU 52+26	0.50	0.59	0.85	3.73	0.54	4.27	24	Pass
EHT20	SDM	2	117	6535	MCS0	RU 106+26	3.00	4.03	3.78	6.92	0.54	7.46	24	Pass
EHT20	SDM	2	149	6695	MCS0	Full	7.50	7.86	8.32	11.11	0.54	11.65	24	Pass
EHT20	SDM	2	149	6695	MCS0	RU 26/0	-3.00	-1.97	-1.49	1.29	0.54	1.83	24	Pass
EHT20	SDM	2	149	6695	MCS0	RU 52/37	-0.50	0.36	0.72	3.55	0.54	4.09	24	Pass
EHT20	SDM	2	149	6695	MCS0	RU 106/53	2.50	3.49	4.06	6.79	0.54	7.33	24	Pass
EHT20	SDM	2	181	6855	MCS0	Full	8.00	8.17	8.59	11.40	0.54	11.94	24	Pass
EHT20	SDM	2	181	6855	MCS0	RU 26/8	-3.50	-2.31	-1.92	0.90	0.54	1.44	24	Pass
EHT20	SDM	2	181	6855	MCS0	RU 52/40	-1.00	-0.12	0.29	3.10	0.54	3.64	24	Pass
EHT20	SDM	2	181	6855	MCS0	RU 106/54	3.00	3.65	3.58	6.63	0.54	7.17	24	Pass
EHT20	SDM	2	185	6875	MCS0	Full	8.00	8.04	8.58	11.33	0.54	11.87	24	Pass
EHT20	SDM	2	185	6875	MCS0	RU 26/8	-3.00	-1.93	-1.51	1.30	0.54	1.84	24	Pass
EHT20	SDM	2	185	6875	MCS0	RU 52/40	-0.50	0.58	0.82	3.71	0.54	4.25	24	Pass
EHT20	SDM	2	185	6875	MCS0	RU 106/54	3.50	4.06	4.11	7.10	0.54	7.64	24	Pass
EHT40	SDM	2	123	6565	MCS0	Full	10.00	10.45	10.64	13.56	0.54	14.10	24	Pass
EHT40	SDM	2	123	6565	MCS0	RU 242/61	5.50	5.86	6.18	9.03	0.54	9.57	24	Pass
EHT40	SDM	2	147	6685	MCS0	Full	10.00	10.39	10.85	13.64	0.54	14.18	24	Pass
EHT40	SDM	2	147	6685	MCS0	RU 242/61	5.50	5.89	7.23	9.62	0.54	10.16	24	Pass
EHT40	SDM	2	179	6845	MCS0	Full	11.00	11.28	11.60	14.45	0.54	14.99	24	Pass
EHT40	SDM	2	179	6845	MCS0	RU 242/62	6.00	6.98	7.21	10.11	0.54	10.65	24	Pass
EHT40	SDM	2	187	6885	MCS0	Full	11.00	11.24	11.51	14.39	0.54	14.93	24	Pass
EHT40	SDM	2	187	6885	MCS0	RU 242/62	5.50	5.52	6.96	9.31	0.54	9.85	24	Pass
EHT80	SDM	2	135	6625	MCS0	Full	13.50	13.79	14.16	16.99	0.54	17.53	24	Pass
EHT80	SDM	2	135	6625	MCS0	RU 484/65	9.00	10.19	9.84	13.03	0.54	13.57	24	Pass
EHT80	SDM	2	135	6625	MCS0	PC 20,Loc:4	11.25	11.57	11.59	14.59	0.54	15.13	24	Pass
EHT80	SDM	2	135	6625	MCS0	Large 484+242,Loc:4	11.00	11.73	11.58	14.66	0.54	15.20	24	Pass
EHT80	SDM	2	151	6705	MCS0	Full	13.50	13.74	14.27	17.02	0.54	17.56	24	Pass
EHT80	SDM	2	151	6705	MCS0	RU 484/65	9.00	9.84	9.95	12.91	0.54	13.45	24	Pass
EHT80	SDM	2	167	6785	MCS0	Full	13.50	13.59	14.12	16.87	0.54	17.41	24	Pass
EHT80	SDM	2	167	6785	MCS0	RU 484/66	9.00	9.66	9.68	12.68	0.54	13.22	24	Pass
EHT80	SDM	2	183	6865	MCS0	Full	14.00	14.06	14.42	17.25	0.54	17.79	24	Pass
EHT80	SDM	2	183	6865	MCS0	RU 484/66	9.50	10.04	10.13	13.10	0.54	13.64	24	Pass
EHT160	SDM	2	143	6665	MCS0	Full	16.50	16.22	16.64	19.45	0.54	19.99	24	Pass
EHT160	SDM	2	143	6665	MCS0	RU 996/S67	12.00	12.49	12.68	15.60	0.54	16.14	24	Pass
EHT160	SDM	2	143	6665	MCS0	PC 20,Loc:8	14.50	14.98	15.11	18.06	0.54	18.60	24	Pass
EHT160	SDM	2	143	6665	MCS0	PC 40,Loc:4	14.00	14.54	14.71	17.64	0.54	18.18	24	Pass
EHT160	SDM	2	143	6665	MCS0	Large 996+484+242,Loc:8	14.00	14.52	14.70	17.62	0.54	18.16	24	Pass
EHT160	SDM	2	143	6665	MCS0	Large 996+484,Loc:4	13.50	14.03	14.29	17.17	0.54	17.71	24	Pass
EHT160	SDM	2	175	6825	MCS0	Full	16.50	15.98	16.57	19.30	0.54	19.84	24	Pass
EHT160	SDM	2	175	6825	MCS0	RU 996/67	12.00	12.49	12.65	15.59	0.54	16.13	24	Pass
EHT320	SDM	2	159	6745	MCS0	Full	18.50	18.84	18.97	21.92	0.54	22.46	24	Pass



EHT320	SDM	2	159	6745	MCS0	RU966*2/70	14.50	14.55	15.20	17.90	0.54	18.44	24	Pass
EHT320	SDM	2	159	6745	MCS0	PC 40,Loc:8	17.00	17.42	17.87	20.66	0.54	21.20	24	Pass
EHT320	SDM	2	159	6745	MCS0	PC 80,Loc:4	15.75	15.62	16.21	18.94	0.54	19.48	24	Pass
EHT320	SDM	2	159	6745	MCS0	PC 80+40,Loc:6	14.00	14.51	14.85	17.69	0.54	18.23	24	Pass
EHT320	SDM	2	159	6745	MCS0	Large 996*3+484,Loc:8	17.00	17.22	17.79	20.52	0.54	21.06	24	Pass
EHT320	SDM	2	159	6745	MCS0	Large 996*3,Loc:4	16.00	16.12	16.84	19.50	0.54	20.04	24	Pass
EHT320	SDM	2	159	6745	MCS0	Large 996*2+484,Loc:6	15.50	15.51	16.24	18.90	0.54	19.44	24	Pass



U-NII-8 MIMO TEST RESULTS DATA														
Average Output Power														
Mode							Power Setting	Average Conducted Power with duty factor(dBm)			Gain(dBi)	EIRP Power (dBm)	EIRP Power Limit (dBm)	Pass/Fail
Band	MIMO	N _{TX}	Channel	Freq (MHz)	Data Rate	RU Config		Ant 6	Ant 7	Ant 6+7	Ant 6+7	Ant 6+7	Ant 6+7	
11a	CDD	2	189	6895	6Mbps	-	5.00	4.68	6.15	8.49	0.01	8.50	24	Pass
11a	CDD	2	209	6995	6Mbps	-	4.50	5.08	4.87	7.99	0.01	8.00	24	Pass
11a	CDD	2	229	7095	6Mbps	-	4.50	4.58	4.69	7.65	0.01	7.66	24	Pass
11a	CDD	2	233	7115	6Mbps	-	4.50	4.65	4.72	7.70	0.01	7.71	24	Pass
HE20	SDM	2	189	6895	MCS0	Full	8.50	8.68	9.07	11.89	0.01	11.90	24	Pass
HE20	SDM	2	189	6895	MCS0	RU 26/0	-2.50	-1.54	-1.15	1.67	0.01	1.68	24	Pass
HE20	SDM	2	189	6895	MCS0	RU 52/37	0.00	1.06	1.39	4.24	0.01	4.25	24	Pass
HE20	SDM	2	189	6895	MCS0	RU 106/53	3.50	4.41	4.62	7.53	0.01	7.54	24	Pass
HE20	SDM	2	209	6995	MCS0	Full	8.00	8.81	8.59	11.71	0.01	11.72	24	Pass
HE20	SDM	2	209	6995	MCS0	RU 26/0	-3.00	-1.57	-1.74	1.36	0.01	1.37	24	Pass
HE20	SDM	2	209	6995	MCS0	RU 52/37	0.00	1.38	0.98	4.19	0.01	4.20	24	Pass
HE20	SDM	2	209	6995	MCS0	RU 106/53	3.00	4.48	4.43	7.47	0.01	7.48	24	Pass
HE20	SDM	2	229	7095	MCS0	Full	8.00	8.39	8.45	11.43	0.01	11.44	24	Pass
HE20	SDM	2	229	7095	MCS0	RU 26/8	-3.00	-1.70	-1.41	1.46	0.01	1.47	24	Pass
HE20	SDM	2	229	7095	MCS0	RU 52/40	0.00	1.24	1.67	4.47	0.01	4.48	24	Pass
HE20	SDM	2	229	7095	MCS0	RU 106/54	4.00	4.30	4.47	7.40	0.01	7.41	24	Pass
HE20	SDM	2	233	7115	MCS0	Full	-3.50	-2.75	-2.59	0.34	0.01	0.35	24	Pass
HE20	SDM	2	233	7115	MCS0	RU 26/8	-14.00	-11.84	-11.40	-8.60	0.01	-8.59	24	Pass
HE20	SDM	2	233	7115	MCS0	RU 52/40	-11.00	-9.70	-9.25	-6.46	0.01	-6.45	24	Pass
HE20	SDM	2	233	7115	MCS0	RU 106/54	-7.50	-6.67	-6.26	-3.45	0.01	-3.44	24	Pass
HE40	SDM	2	195	6925	MCS0	Full	11.00	11.52	11.38	14.46	0.01	14.47	24	Pass
HE40	SDM	2	195	6925	MCS0	RU 242/61	6.50	7.65	7.54	10.61	0.01	10.62	24	Pass
HE40	SDM	2	211	7005	MCS0	Full	10.50	11.47	10.91	14.21	0.01	14.22	24	Pass
HE40	SDM	2	211	7005	MCS0	RU 242/61	7.00	8.28	7.87	11.09	0.01	11.10	24	Pass
HE40	SDM	2	227	7085	MCS0	Full	10.50	11.01	10.94	13.99	0.01	14.00	24	Pass
HE40	SDM	2	227	7085	MCS0	RU 242/62	7.00	7.89	7.78	10.85	0.01	10.86	24	Pass
HE80	SDM	2	199	6945	MCS0	Full	14.00	14.36	14.09	17.24	0.01	17.25	24	Pass
HE80	SDM	2	199	6945	MCS0	RU 484/65	9.50	10.51	10.13	13.34	0.01	13.35	24	Pass
HE80	SDM	2	215	7025	MCS0	Full	13.00	13.95	13.32	16.66	0.01	16.67	24	Pass
HE80	SDM	2	215	7025	MCS0	RU 484/66	9.50	10.76	10.03	13.42	0.01	13.43	24	Pass
HE160	SDM	2	207	6985	MCS0	Full	17.00	17.14	16.65	19.91	0.01	19.92	24	Pass
HE160	SDM	2	207	6985	MCS0	RU 996/S67	12.50	13.41	13.13	16.29	0.01	16.30	24	Pass
EHT20	SDM	2	189	6895	MCS0	Full	8.50	8.71	9.09	11.91	0.01	11.92	24	Pass
EHT20	SDM	2	189	6895	MCS0	RU 26/0	-2.50	-1.47	-1.08	1.74	0.01	1.75	24	Pass
EHT20	SDM	2	189	6895	MCS0	RU 52/37	0.00	1.08	1.41	4.26	0.01	4.27	24	Pass
EHT20	SDM	2	189	6895	MCS0	RU 106/53	3.50	4.48	4.64	7.57	0.01	7.58	24	Pass
EHT20	SDM	2	209	6995	MCS0	Full	8.00	8.83	8.62	11.74	0.01	11.75	24	Pass
EHT20	SDM	2	209	6995	MCS0	RU 26/0	-3.00	-1.54	-1.71	1.39	0.01	1.40	24	Pass
EHT20	SDM	2	209	6995	MCS0	RU 52/37	0.00	1.47	1.01	4.26	0.01	4.27	24	Pass



EHT20	SDM	2	209	6995	MCS0	RU 106/53	3.00	4.52	4.51	7.53	0.01	7.54	24	Pass
EHT20	SDM	2	229	7095	MCS0	Full	8.00	8.42	8.48	11.46	0.01	11.47	24	Pass
EHT20	SDM	2	229	7095	MCS0	RU 26/8	-3.00	-1.61	-1.35	1.53	0.01	1.54	24	Pass
EHT20	SDM	2	229	7095	MCS0	RU 52/40	0.00	1.29	1.74	4.53	0.01	4.54	24	Pass
EHT20	SDM	2	229	7095	MCS0	RU 106/54	4.00	4.32	4.49	7.42	0.01	7.43	24	Pass
EHT20	SDM	2	229	7095	MCS0	RU 52+26	0.00	0.85	1.28	4.08	0.01	4.09	24	Pass
EHT20	SDM	2	229	7095	MCS0	RU 106+26	4.00	4.28	4.36	7.33	0.01	7.34	24	Pass
EHT20	SDM	2	233	7115	MCS0	Full	-3.50	-2.72	-2.51	0.40	0.01	0.41	24	Pass
EHT20	SDM	2	233	7115	MCS0	RU 26/8	-14.00	-11.81	-11.38	-8.58	0.01	-8.57	24	Pass
EHT20	SDM	2	233	7115	MCS0	RU 52/40	-11.00	-9.61	-9.19	-6.38	0.01	-6.37	24	Pass
EHT20	SDM	2	233	7115	MCS0	RU 106/54	-7.50	-6.64	-6.19	-3.40	0.01	-3.39	24	Pass
EHT20	SDM	2	233	7115	MCS0	RU 52+26	-11.00	-9.94	-9.52	-6.71	0.01	-6.70	24	Pass
EHT20	SDM	2	233	7115	MCS0	RU 106+26	-7.50	-6.71	-6.21	-3.44	0.01	-3.43	24	Pass
EHT40	SDM	2	195	6925	MCS0	Full	11.00	11.54	11.43	14.50	0.01	14.51	24	Pass
EHT40	SDM	2	195	6925	MCS0	RU 242/61	6.50	7.69	7.61	10.66	0.01	10.67	24	Pass
EHT40	SDM	2	211	7005	MCS0	Full	10.50	11.49	10.92	14.22	0.01	14.23	24	Pass
EHT40	SDM	2	211	7005	MCS0	RU 242/61	7.00	8.33	7.93	11.14	0.01	11.15	24	Pass
EHT40	SDM	2	227	7085	MCS0	Full	10.50	11.02	10.97	14.01	0.01	14.02	24	Pass
EHT40	SDM	2	227	7085	MCS0	RU 242/62	7.00	7.92	7.87	10.91	0.01	10.92	24	Pass
EHT80	SDM	2	199	6945	MCS0	Full	14.00	14.39	14.11	17.26	0.01	17.27	24	Pass
EHT80	SDM	2	199	6945	MCS0	RU 484/65	9.50	10.55	10.18	13.38	0.01	13.39	24	Pass
EHT80	SDM	2	215	7025	MCS0	Full	13.00	13.97	13.38	16.70	0.01	16.71	24	Pass
EHT80	SDM	2	215	7025	MCS0	RU 484/66	9.50	10.81	10.10	13.48	0.01	13.49	24	Pass
EHT80	SDM	2	215	7025	MCS0	PC 20,Loc:1	10.75	12.25	11.23	14.78	0.01	14.79	24	Pass
EHT80	SDM	2	215	7025	MCS0	Large 484+242,Loc:1	11.00	12.64	11.73	15.22	0.01	15.23	24	Pass
EHT160	SDM	2	207	6985	MCS0	Full	17.00	17.17	16.67	19.94	0.01	19.95	24	Pass
EHT160	SDM	2	207	6985	MCS0	RU 996/S67	12.50	13.49	13.17	16.35	0.01	16.36	24	Pass
EHT160	SDM	2	207	6985	MCS0	PC 20,Loc:1	15.00	15.84	15.44	18.65	0.01	18.66	24	Pass
EHT160	SDM	2	207	6985	MCS0	PC 40,Loc:1	14.50	15.41	15.01	18.22	0.01	18.23	24	Pass
EHT160	SDM	2	207	6985	MCS0	Large 996+484+242,Loc:1	14.50	15.58	15.18	18.39	0.01	18.40	24	Pass
EHT160	SDM	2	207	6985	MCS0	Large 996+484,Loc:1	14.00	14.83	14.65	17.75	0.01	17.76	24	Pass
EHT320	SDM	2	191	6905	MCS0	Full	17.50	16.39	16.60	19.51	0.01	19.52	24	Pass
EHT320	SDM	2	191	6905	MCS0	RU96*2/70	14.50	14.81	14.85	17.84	0.01	17.85	24	Pass
EHT320	SDM	2	191	6905	MCS0	PC 40,Loc:1	16.50	16.70	16.99	19.86	0.01	19.87	24	Pass
EHT320	SDM	2	191	6905	MCS0	PC 80,Loc:1	15.25	15.14	15.43	18.30	0.01	18.31	24	Pass
EHT320	SDM	2	191	6905	MCS0	PC 80+40,Loc:7	13.50	14.17	14.44	17.32	0.01	17.33	24	Pass
EHT320	SDM	2	191	6905	MCS0	Large 996*3+484,Loc:1	16.50	16.93	17.20	20.07	0.01	20.08	24	Pass
EHT320	SDM	2	191	6905	MCS0	Large 996*3,Loc:1	16.00	16.24	16.51	19.39	0.01	19.40	24	Pass
EHT320	SDM	2	191	6905	MCS0	Large 996*2+484,Loc:7	15.00	15.22	15.57	18.41	0.01	18.42	24	Pass

3.3 Fundamental Power Spectral Density Measurement

3.3.1 Limit of Fundamental Power Spectral Density

<FCC 14-30 CFR 15.407>

(a)(8) For client devices operating under the control of an indoor access point in the 5.925-7.125 GHz bands, the maximum power spectral density must not exceed -1 dBm e.i.r.p. in any 1-megahertz band.

3.3.2 Measuring Instruments

See list of measuring equipment of this test report.

3.3.3 Test Procedures

The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
Section F) Maximum power spectral density.

Method SA-2

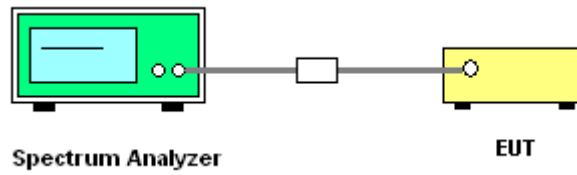
(trace averaging across on and off times of the EUT transmissions, followed by duty cycle correction).

- Measure the duty cycle.
 - Set span to encompass the entire emission bandwidth (EBW) of the signal.
 - Set RBW = 1 MHz.
 - Set VBW $\geq$ 3 MHz.
 - Number of points in sweep $\geq$ 2 Span / RBW.
 - Sweep time = auto.
 - Detector = RMS
 - Trace average at least 100 traces in power averaging mode.
 - Add $10 \log(1/x)$, where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times. For example, add $10 \log(1/0.25) = 6$ dB if the duty cycle is 25 percent.
1. The RF output of EUT was connected to the spectrum analyzer by a low loss cable.
 2. Each plot has already offset with cable loss, attenuator loss and duty factor. Measure the PSD and record it.
 3. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

Method (b): Measure and sum spectral maxima across the outputs.

The measurement on each individual output were performed with the same span and number on each individual output. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs.

3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.

3.4 In-Band Emissions (Channel Mask)

3.4.1 Limit of Unwanted Emissions

<FCC 14-30 CFR 15.407>

(b)(7) For transmitters operating within the 5.925-7.125 GHz bands: Power spectral density must be suppressed by 20 dB at 1 MHz outside of channel edge, by 28 dB at one channel bandwidth from the channel center, and by 40 dB at one- and one-half times the channel bandwidth away from channel center. At frequencies between one megahertz outside an unlicensed device's channel edge and one channel bandwidth from the center of the channel, the limits must be linearly interpolated between 20 dB and 28 dB suppression, and at frequencies between one and one- and one-half times an unlicensed device's channel bandwidth, the limits must be linearly interpolated between 28 dB and 40 dB suppression. Emissions removed from the channel center by more than one- and one-half times the channel bandwidth must be suppressed by at least 40 dB.

3.4.2 Measuring Instruments

See list of measuring equipment of this test report.

3.4.3 Test Procedures

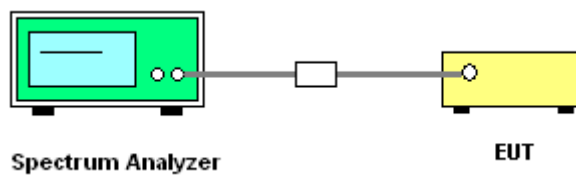
The testing follows FCC KDB 987594 D02 U-NII 6GHz EMC Measurement.

Section J) In-Band Emissions.

1. Take nominal bandwidth as reference channel bandwidth provided that 26 dB emission bandwidth is always larger than nominal bandwidth
2. Measure the power spectral density (which will be used for emissions mask reference) using the following procedure:
 - a) Set the span to encompass the entire 26 dB EBW of the signal.
 - b) Set RBW = same RBW used for 26 dB EBW measurement.
 - c) Set VBW $\geq 3 \times$ RBW
 - d) Number of points in sweep $\geq [2 \times \text{span} / \text{RBW}]$.
 - e) Sweep time = auto.
 - f) Detector = RMS (i.e., power averaging)
 - g) Trace average at least 100 traces in power averaging (rms) mode.
 - h) Use the peak search function on the instrument to find the peak of the spectrum.
3. Using the measuring equipment limit line function, develop the emissions mask based on the following requirements. The emissions power spectral density must be reduced below the peak power spectral density (in dB) as follows:
 - a. Suppressed by 20 dB at 1 MHz outside of the channel edge.
 - b. Suppressed by 28 dB at one channel bandwidth from the channel center.

- c. Suppressed by 40 dB at one- and one-half times the channel bandwidth from the channel center.
4. Adjust the span to encompass the entire mask as necessary.
5. Clear trace.
6. Trace average at least 100 traces in power averaging (rms) mode.
7. Adjust the reference level as necessary so that the crest of the channel touches the top of the emission mask.

3.4.4 Test Setup



3.4.5 Test Result

Please refer to Appendix A.

3.5 Contention Based Protocol

3.5.1 Limit of Contention Based Protocol

<FCC 14-30 CFR 15.407>

(d)(6) All U-NII transmitters, except for standard power access points and fixed client devices, operating in the 5.925-7.125 GHz band must employ a contention-based protocol.

Unlicensed low-power indoor devices must detect co-channel radio frequency power that is at least -62 dBm or lower. Upon detection of energy in the band, unlicensed low power indoor devices must vacate the channel and stay off the channel as long as detected radio frequency power is equal to or greater than the threshold (-62 dBm). The -62 dBm (or lower) threshold is referenced to a 0 dBi antenna gain. To ensure incumbent operations are reliably detected in the band, low power indoor devices must detect RF energy throughout their intended operating channel. For example, an 802.11 device that plans to transmit a 40 MHz- wide signal (on a primary 20 MHz channel and a secondary 20 MHz channel) must detect energy throughout the entire 40 MHz channel. Additionally, low-power indoor devices must detect co-channel energy with 90% or greater certainty.

Table 1. Criteria to determine number of times detection threshold test may be performed

If	Number of Tests	Placement of Incumbent Transmission
$BW_{EUT} \leq BW_{Inc}$	Once	Tune incumbent and EUT transmissions ($f_{c1} = f_{c2}$)
$BW_{Inc} < BW_{EUT} \leq 2BW_{Inc}$	Once	Incumbent transmission is contained within BW_{EUT}
$2BW_{Inc} < BW_{EUT} \leq 4BW_{Inc}$	Twice. Incumbent transmission is contained within BW_{EUT}	Incumbent transmission is located as closely as possible to the lower edge and upper edge, respectively, of the EUT channel
$BW_{EUT} > 4BW_{Inc}$	Three times	Incumbent transmission is located as closely as possible to the lower edge of the EUT channel, in the middle of EUT channel, and as closely as possible to the upper edge of the EUT channel

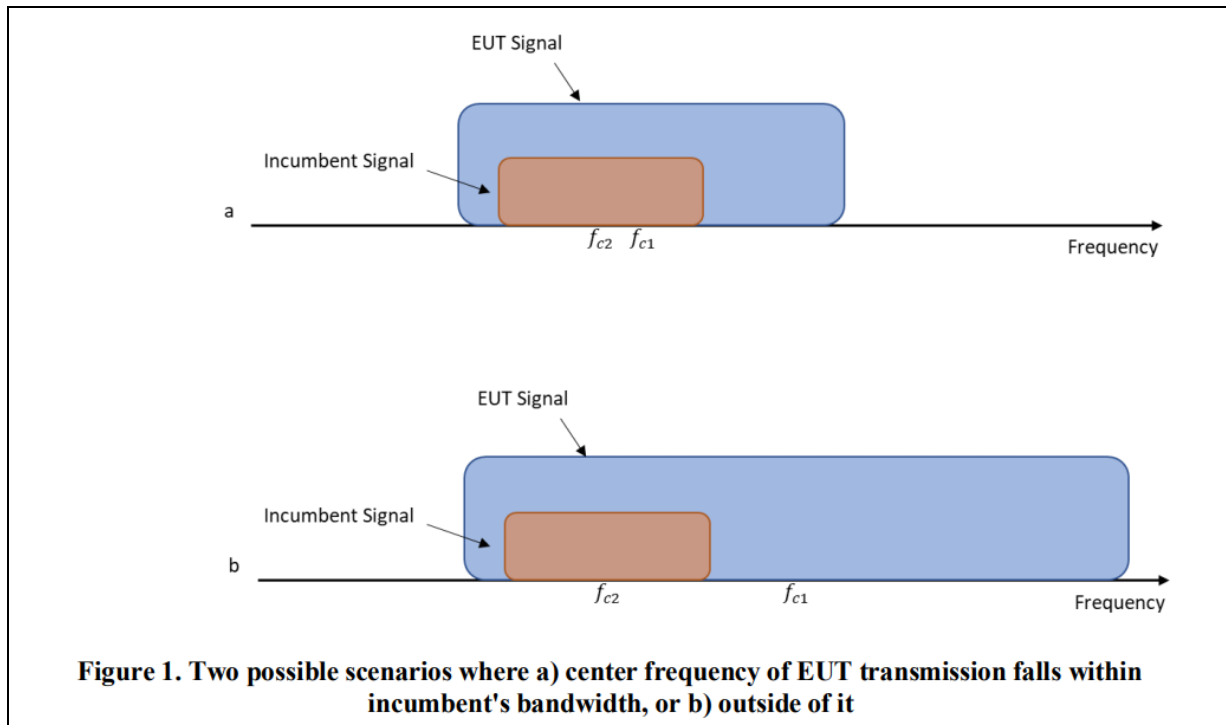
where:

BW_{EUT} : Transmission bandwidth of EUT signal

BW_{Inc} : Transmission bandwidth of the simulated incumbent signal (10 MHz wide AWGN signal)

f_{c1} : Center frequency of EUT transmission

f_{c2} : Center frequency of simulated incumbent signal



3.5.2 Measuring Instruments

See list of measuring equipment of this test report.

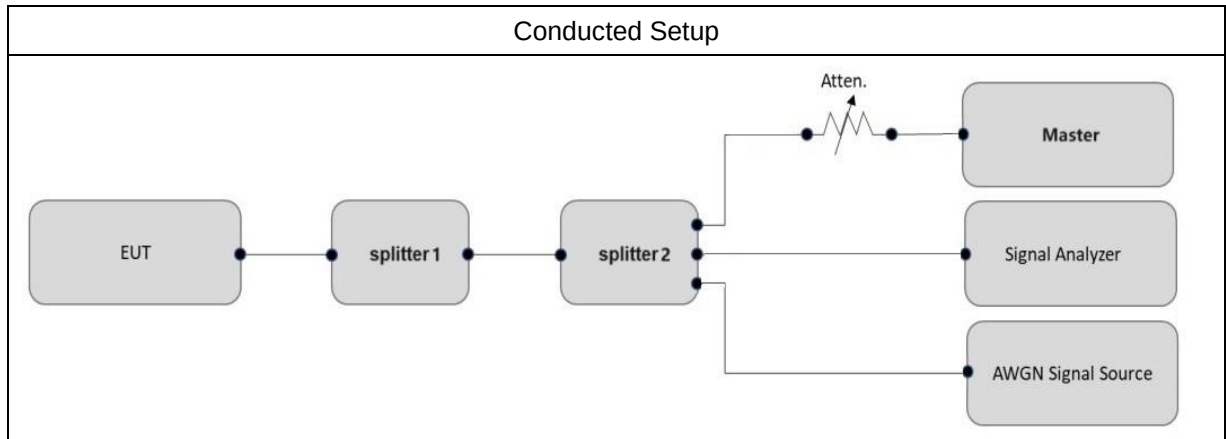
3.5.3 Test Procedures

1. To ensure EUT reliably detects an incumbent signal in both scenarios shown in Figure 1, the detection threshold test may be repeated more than once with the incumbent signal (having center frequency f_{c2}) tuned to different center frequencies within the UT transmission bandwidth. The criteria specified in Table 1 determines how many times the detection threshold test must be performed
2. Using an AWGN signal source, generate (but do not transmit, i.e., RF OFF) a 10 MHz-wide AWGN signal. Use Table 1 to determine the center frequency of the 10 MHz AWGN signal relative to the EUT's channel bandwidth and center frequency.
3. Monitor the signal analyzer to verify if the AWGN signal has been detected and the EUT has ceased transmission. If the EUT continues to transmit, then incrementally increase the AWGN signal power level until the EUT stops transmitting.
4. (Including all losses in the RF paths) Determine and record the AWGN signal power level (at the EUT's antenna port) at which the EUT ceased transmission. Repeat the procedure at least 10 times to verify the EUT can detect an AWGN signal with 90% (or better) level of certainty.
5. Refer to Table 1 to determine number of times the detection threshold testing needs to be repeated. If testing is required more than once, then go back to step 2, choose a different center

frequency for the AWGN signal and repeat the process.

6. EUT was driven in MIMO mode, the interferer signal was injected to both chains to monitor the performance, while the interferer level is determined according to the lowest antenna gain among both antennas.

3.5.4 Test Setup



3.5.5 Support Unit used in test configuration and system

Instrument	Brand Name	Model No.	Characteristics
Signal Generator	Keysight	5182B/5182BX07	9KHz~7.2GHz
Spectrum Analyzer	R&S	FSV40	10kHz~40GHz
Terminal (NB Server)	DELL	P78G	LAN
Combiner (splitter1)	Tojoin	N/A	2G~8GHz
Combiner (splitter2)	MTJ Cooperation	MTJ7144-M	0.5GHz~18GHz
Attenuator	Keysight	8494B	0-110dBm
WLAN AP	ASUS	ASUS RT-BE96U	Dual Band AP

3.5.6 Test Summary of Contention Based Protocol Test

Band	Channel Freq. (MHz)	Channel BW (MHz)	Incumbent freq. (MHz)	Injected AWGN Level (dBm)	Detection Rate (%)	Regulated Threshold level (dBm)	Adjusted Power (dBm)	Margin (dB)
UNII Band 5	6135	20	6135	-64.99	100	-62	-64.58	2.58
				Result: Stop Transmission				
				-65.99	< 90	-62	-65.58	3.58
				Result: Minimal Operation				
				-71.42	0	-62	-71.01	9.01
				Result: Normal Operation				
UNII Band 5	6105	320	5950	-70.81	100	-62	-70.4	8.4
				Result: Stop Transmission				
				-71.81	< 90	-62	-71.4	9.4
				Result: Minimal Operation				
				-72.77	0	-62	-72.36	10.36
				Result: Normal Operation				
			6105	-63.69 (Worse)	100	-62	-63.28	1.28
				Result: Stop Transmission				
				-64.69	< 90	-62	-64.28	2.28
				Result: Minimal Operation				
				-71.49	0	-62	-71.08	9.08
				Result: Normal Operation				
			6260	-70.19	100	-62	-69.78	7.78
				Result: Stop Transmission				
				-71.19	< 90	-62	-70.78	8.78
				Result: Minimal Operation				
				-72.74	0	-62	-72.33	10.33
				Result: Normal Operation				

Note 1: Adjusted Power = Injected AWGN Level - minimum antenna gain (Antenna 6, gain = -0.41dBi)

Note 2: Path Loss between antenna and RF connector is negligible. (0 dB)

Note 3: Margin = Regulated Threshold level - Adjusted Power



Band	Channel Freq. (MHz)	Channel BW (MHz)	Incumbent freq. (MHz)	Injected AWGN Level (dBm)	Detection Rate (%)	Regulated Threshold level (dBm)	Adjusted Power (dBm)	Margin (dB)
UNII Band 6	6455	20	6455	-66.98	100	-62	-66.57	4.57
					Result: Stop Transmission			
				-67.98	< 90	-62	-67.57	5.57
					Result: Minimal Operation			
				-71.96	0	-62	-71.55	9.55
					Result: Normal Operation			

Note 1: Adjusted Power = Injected AWGN Level - minimum antenna gain (Antenna 6, gain = -0.41dBi)

Note 2: Path Loss between antenna and RF connector is negligible. (0 dB)

Note 3: Margin = Regulated Threshold level - Adjusted Power



Band	Channel Freq. (MHz)	Channel BW (MHz)	Incumbent freq. (MHz)	Injected AWGN Level (dBm)	Detection Rate (%)	Regulated Threshold level (dBm)	Adjusted Power (dBm)	Margin (dB)
UNII Band 7	6695	20	6695	-70.90	100	-62	-70.49	8.49
				Result: Stop Transmission				
				-71.90	< 90	-62	-71.49	9.49
				Result: Minimal Operation				
				-73.03	0	-62	-72.62	10.62
				Result: Normal Operation				
UNII Band 6/7	6585	320	6430	-66.98	100	-62	-66.57	4.57
				Result: Stop Transmission				
				-67.98	< 90	-62	-67.57	5.57
				Result: Minimal Operation				
				-71.96	0	-62	-71.55	9.55
				Result: Normal Operation				
			6585	-71.63	100	-62	-71.22	9.22
				Result: Stop Transmission				
				-72.63	< 90	-62	-72.22	10.22
				Result: Minimal Operation				
				-72.82	0	-62	-72.41	10.41
				Result: Normal Operation				
			6740	-66.54	100	-62	-66.13	4.13
				Result: Stop Transmission				
				-67.54	< 90	-62	-67.13	5.13
				Result: Minimal Operation				
				-72.04	0	-62	-71.63	9.63
				Result: Normal Operation				

Note 1: Adjusted Power = Injected AWGN Level - minimum antenna gain (Antenna 6, gain = -0.41dBi)

Note 2: Path Loss between antenna and RF connector is negligible. (0 dB)

Note 3: Margin = Regulated Threshold level - Adjusted Power



Band	Channel Freq. (MHz)	Channel BW (MHz)	Incumbent freq. (MHz)	Injected AWGN Level (dBm)	Detection Rate (%)	Regulated Threshold level (dBm)	Adjusted Power (dBm)	Margin (dB)
UNII Band 8	7015	20	7015	-70.34	100	-62	-69.93	7.93
				Result: Stop Transmission				
				-71.34	< 90	-62	-70.93	8.93
				Result: Minimal Operation				
				-73.70	0	-62	-73.29	11.29
				Result: Normal Operation				
UNII Band 7/ 8	6905	320	6750	-70.18	100	-62	-69.77	7.77
				Result: Stop Transmission				
				-71.18	< 90	-62	-70.77	8.77
				Result: Minimal Operation				
				-72.69	0	-62	-72.28	10.28
				Result: Normal Operation				
			6905	-65.52	100	-62	-65.11	3.11
				Result: Stop Transmission				
				-66.52	< 90	-62	-66.11	4.11
				Result: Minimal Operation				
				-72.08	0	-62	-71.67	9.67
				Result: Normal Operation				
			7060	-73.09	100	-62	-72.68	10.68
				Result: Stop Transmission				
				-74.09	< 90	-62	-73.68	11.68
				Result: Minimal Operation				
				-75.24	0	-62	-74.83	12.83
				Result: Normal Operation				

Note 1: Adjusted Power = Injected AWGN Level - minimum antenna gain (Antenna 6, gain = -0.41dBi)

Note 2: Path Loss between antenna and RF connector is negligible. (0 dB)

Note 3: Margin = Regulated Threshold level - Adjusted Power

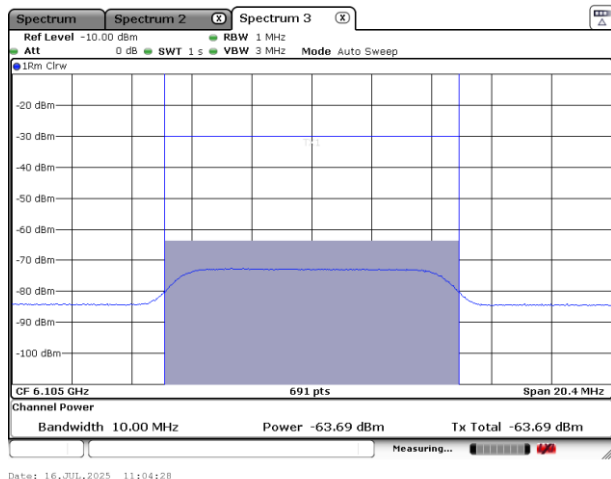


3.5.7 Worst Case Plots of Contention Based Protocol

Contention Based Protocol Result Plots on U-NII 5 (AWGN Interference)

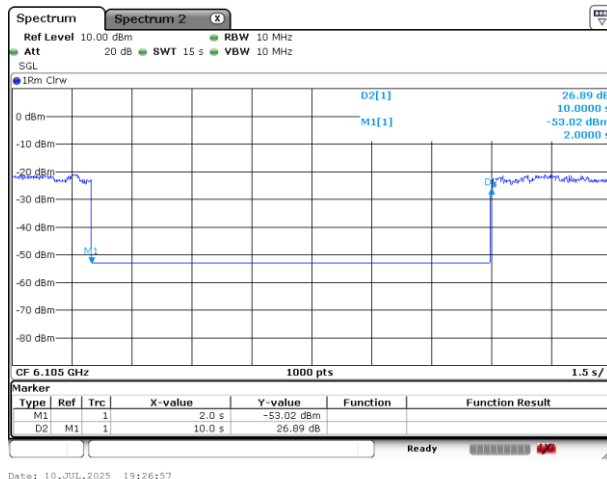
802.11be (EHT320) / 6105MHz (Middle)

Threshold Level (TL) = -63.69 dBm



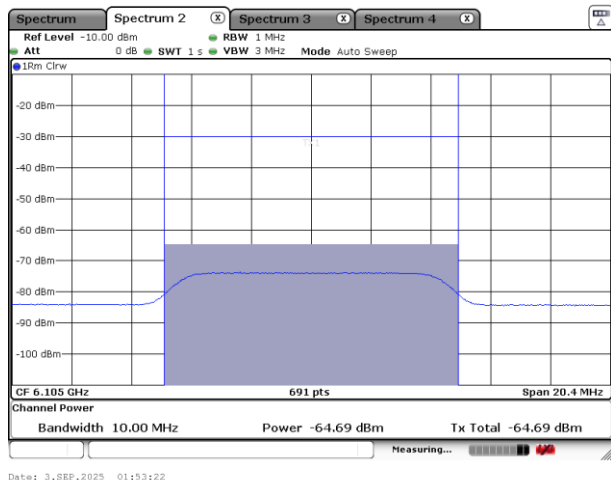
802.11be (EHT320) / CH31 (Middle)

Test result is pass due to no transmission occur.



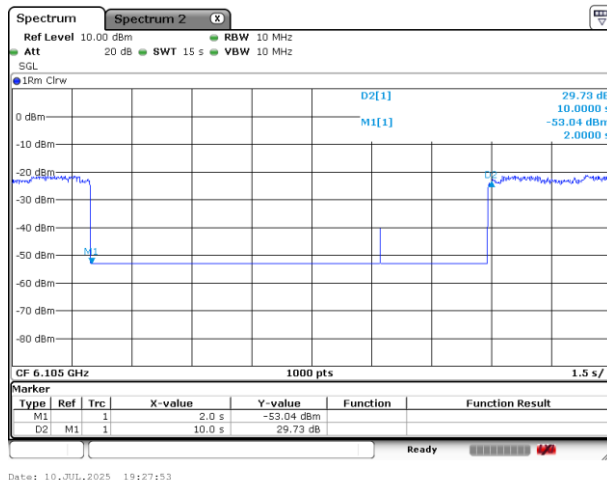
802.11be (EHT320) / 6105MHz (Middle)

Threshold Level (TL) = -64.69 dBm



802.11be (EHT320) / CH31 (Middle)

Transmit when the interferer is 1dB lower.



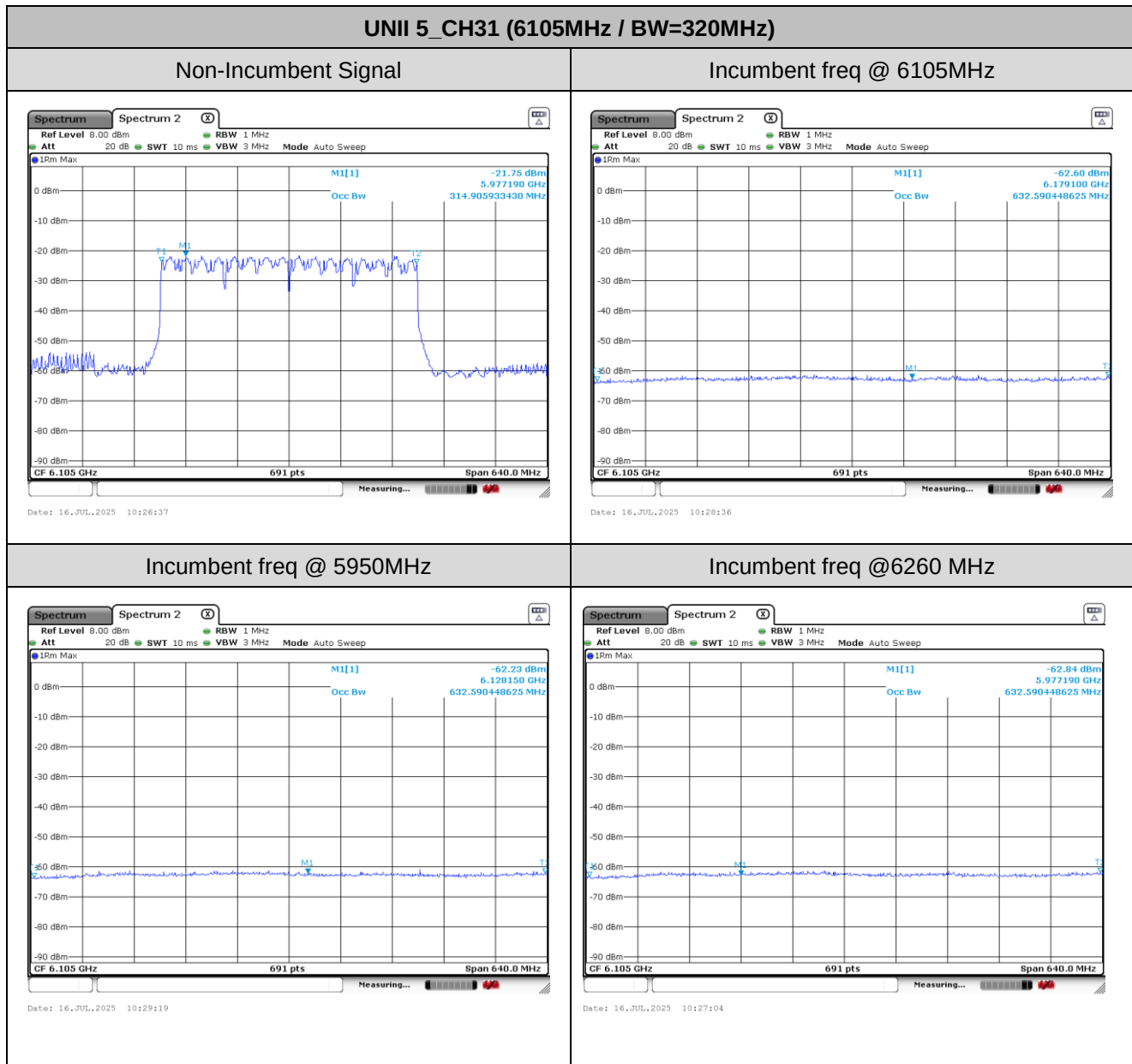
Remark: M1: Injection of AWGN signal, D1: Removal of AWGN signal



3.5.8 Worst Case of Contention Based Protocol Transmission Bandwidth

Verify transmission absence when Incumbent signal at different frequency (frequency domain plots).

1. When Incumbent Signal inject at lowest frequency, the whole 320MHz bandwidth stop transmission;
2. When Incumbent Signal inject at middle frequency, the whole 320MHz bandwidth stop transmission;
3. When Incumbent Signal inject at highest frequency, the whole 320MHz bandwidth stop transmission;



3.6 Unwanted Emissions Measurement

This section is to measure unwanted emissions through radiated measurement for band edge spurious emissions and out of band emissions measurement.

3.6.1 Limit of Unwanted Emissions

- (1) For transmitters operating within the 5.925-7.125 GHz band: Any emissions outside of the 5.925-7.125 GHz band must not exceed an e.i.r.p. of -27 dBm/MHz.

EIRP (dBm)	Field Strength at 3m (dBμV/m)
- 27 (RMS)	68.2
- 7 (Peak)	88.2

Unwanted emissions outside of restricted bands are measured with a RMS detector.

In addition, 15.35(b) applies where the peak emissions must be limited to no more than 20 dB above the average limit

- (2) Unwanted spurious emissions fallen in restricted bands shall comply with the general field strength limits as below table:

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

Note: The following formula is used to convert the EIRP to field strength.

$$E = \frac{1000000\sqrt{30P}}{3} \mu\text{V/m, where P is the eirp (Watts)}$$

3.6.2 Measuring Instruments

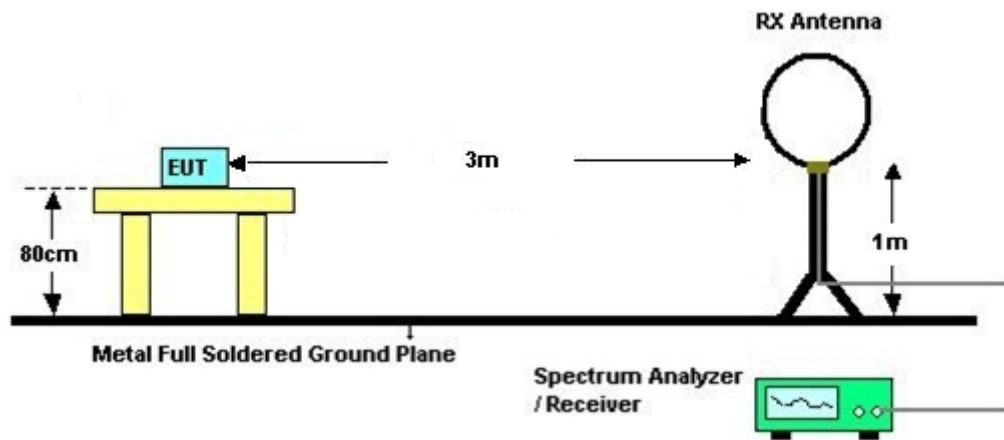
See list of measuring equipment of this test report.

3.6.3 Test Procedures

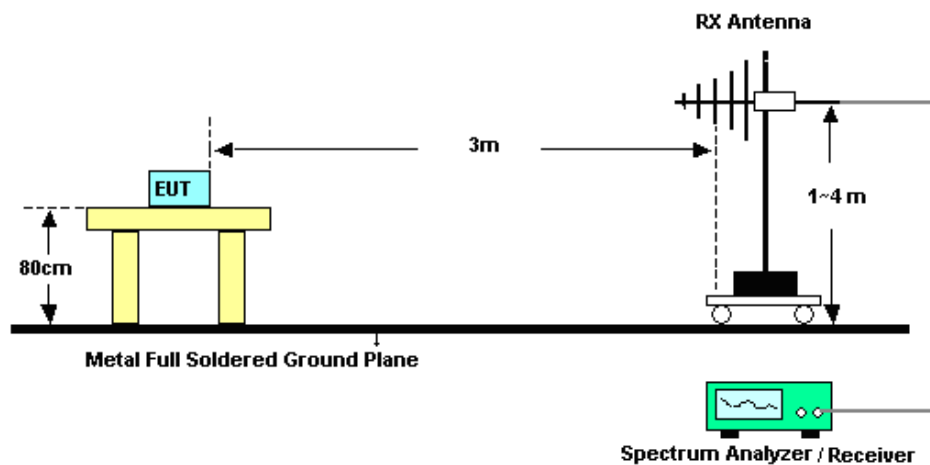
1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
Section G) Unwanted emissions measurement.
 - (1) Procedure for Unwanted Emissions Measurements Below 1000MHz
 - RBW = 120 kHz
 - VBW = 300 kHz
 - Detector = Peak
 - Trace mode = max hold
 - (2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz
 - RBW = 1 MHz
 - VBW $\geq$ 3 MHz
 - Detector = Peak
 - Sweep time = auto
 - Trace mode = max hold
 - (3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz
 - RBW = 1 MHz
 - VBW = 10 Hz, when duty cycle is no less than 98 percent.
 - VBW $\geq$ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband antenna and its height is adjusted between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT was arranged to its worst case and then adjust the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. For testing below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
7. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

3.6.4 Test Setup

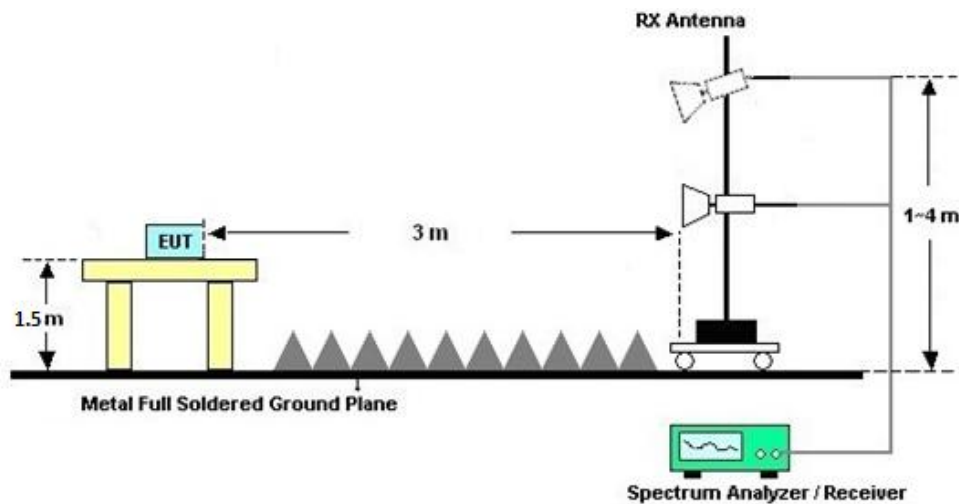
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz





3.6.5 Test Results of Radiated Spurious Emissions (9 kHz ~ 30 MHz)

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

There is adequate comparison measurement of both open-field test site and alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site v01r01, and the result came out very similar.

3.6.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix C

3.6.7 Duty Cycle

Please refer to Appendix D.

3.6.8 Test Result of Radiated Spurious Emissions (30MHz ~ 10th Harmonic)

Please refer to Appendix C.

The emission level above 18GHz is checked that the emission level is noise floor only, so it is not reflected in the report.

3.7 AC Conducted Emission Measurement

3.7.1 Limit of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency of emission (MHz)	Conducted limit (dB μ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

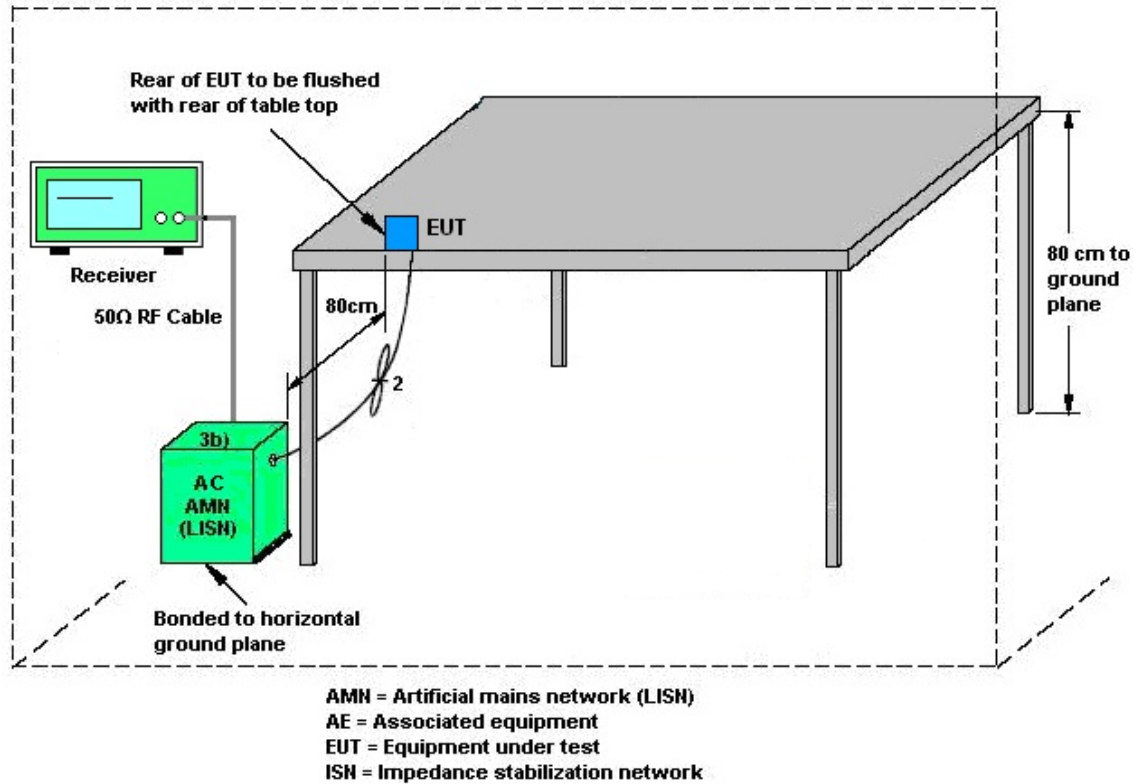
3.7.2 Measuring Instruments

See list of measuring equipment of this test report.

3.7.3 Test Procedures

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.

3.7.4 Test Setup



3.7.5 Test Result of AC Conducted Emission

Please refer to Appendix B.

3.8 Antenna Requirements

3.8.1 Standard Applicable

§15.203: An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

3.8.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used. The EUT complies with the requirement of 15.203.

3.8.3 Antenna Gain

<CDD Modes >

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For 802.11a/ax mode, directional gain is calculated as

For power, the directional gain G_{ANT} is set equal to the antenna having the highest gain, i.e.,

Directional gain = $G_{ANT\ MAX}(Ant.1\ Gain, Ant.2\ Gain, \dots) + \text{Array Gain}$, as following table for Power, where Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;

For PSD, the directional gain calculation is following,

Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{Gn/20})^2 / N_{ANT}]$ dBi, as following table for PSD.

N_{ANT} = number of transmit antennas

N_{SS} = number of spatial streams. (The worst case directional gain will occur when $N_{SS} = 1$)

			DG for Power (dBi)	DG for PSD (dBi)
	Ant. 6 (dBi)	Ant. 7 (dBi)		
UNII-5	-0.30	1.01	1.01	3.39
UNII-6	-0.41	0.02	0.02	2.82
UNII-7	0.54	0.23	0.54	3.40
UNII-8	-0.20	0.01	0.01	2.92

<SDM Modes>

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For 802.11ax mode, directional gain is calculated as

For power, the directional gain G_{ANT} is set equal to the antenna having the highest gain, i.e.,

Directional gain = $G_{ANT\ MAX}(Ant.1\ Gain, Ant.2\ Gain, \dots) + \text{Array Gain}$, as following table for Power, where Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;

For PSD, the directional gain calculation is following,

Directional gain = $10 \log[(10^{G1/10} + 10^{G2/10} + \dots + 10^{Gn/10})/N_{ANT}]$ dBi, as following table for PSD.

N_{ANT} = number of transmit antennas

			DG for Power (dBi)	DG for PSD (dBi)
	Ant. 6 (dBi)	Ant. 7 (dBi)		
U-NII-5	-0.30	1.01	1.01	0.40
U-NII-6	-0.41	0.02	0.02	-0.19
U-NII-7	0.54	0.23	0.54	0.39
U-NII-8	-0.20	0.01	0.01	-0.09

<TXBF modes>

The EUT supports TXBF mode for 11ax.

FCC KDB 662911 D01 Multiple Transmitter Output v02r01, directional gain is calculated as

$$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$$

where

Each antenna is driven by no more than one spatial stream;

N_{SS} = the number of independent spatial streams of data;

N_{ANT} = the total number of antennas

$g_{j,k} = 10^{G_k / 20}$ if the k th antenna is being fed by spatial stream j , or zero if it is not;
 G_k is the gain in dBi of the k th antenna.

The directional gain calculation is following F)2)e)ii) of KDB 662911 D01 v02r01.

The directional gain "DG" is calculated as following table.

			DG for Power (dBi)	DG for PSD (dBi)
	Ant. 6 (dBi)	Ant. 7 (dBi)		
UNII-5	-0.30	1.01	3.39	3.39
UNII-6	-0.41	0.02	2.82	2.82
UNII-7	0.54	0.23	3.40	3.40
UNII-8	-0.20	0.01	2.92	2.92



4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101040	10Hz~40GHz	Oct. 10, 2024	Jul. 03, 2025~ Sep. 05, 2025	Oct. 09, 2025	Conducted (TH01-KS)
Pulse Power Sensor	Anritsu	MA2411B	0917070	300MHz~40GHz	Jan. 02, 2025	Jul. 03, 2025~ Sep. 05, 2025	Jan. 01, 2026	Conducted (TH01-KS)
Power Meter	Anritsu	ML2495A	1005002	50MHz Bandwidth	Jan. 02, 2025	Jul. 03, 2025~ Sep. 05, 2025	Jan. 01, 2026	Conducted (TH01-KS)
EMI Test Receiver	Keysight	N9038A	MY572901 51	3Hz~8.5GHz;M ax 30dBm	Jul. 03, 2025	Jul. 27, 2025	Jul. 02, 2026	Radiation (03CH05-KS)
EXA Spectrum Analyzer	Keysight	N9010B	MY602421 26	10Hz~44G,MAX 30dB	Oct. 10, 2024	Jul. 27, 2025	Oct. 09, 2025	Radiation (03CH05-KS)
Loop Antenna	R&S	HFH2-Z2E	101125	9kHz~30MHz	Sep. 08, 2024	Jul. 27, 2025	Sep. 07, 2025	Radiation (03CH05-KS)
Bilog Antenna	TeseQ	CBL6111D	49921	30MHz~1GHz	Mar. 24, 2025	Jul. 27, 2025	Mar. 23, 2026	Radiation (03CH05-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00251982	1GHz~18GHz	Aug. 16, 2024	Jul. 27, 2025	Aug. 15, 2025	Radiation (03CH05-KS)
SHF-EHF Horn	Com-power	AH-840	101116	18GHz~40GHz	Oct. 22, 2024	Jul. 27, 2025	Oct. 21, 2025	Radiation (03CH05-KS)
Amplifier	SONOMA	310N	380826	9KHz~1GHz	Jul. 02, 2025	Jul. 27, 2025	Jul. 01, 2026	Radiation (03CH05-KS)
Amplifier	EM	EM18G40GA	060851	18~40GHz	Jan. 02, 2025	Jul. 27, 2025	Jan. 01, 2026	Radiation (03CH05-KS)
high gain Amplifier	EM	EM01G18GA	060843	1Ghz~18Ghz	Jan. 02, 2025	Jul. 27, 2025	Jan. 01, 2026	Radiation (03CH05-KS)
Amplifier	EM	EM01G18GA	060833	1Ghz~18Ghz	Jan. 02, 2025	Jul. 27, 2025	Jan. 01, 2026	Radiation (03CH05-KS)
AC Power Source	Chroma	61601	F1040900 04	N/A	NCR	Jul. 27, 2025	NCR	Radiation (03CH05-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Jul. 27, 2025	NCR	Radiation (03CH05-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Jul. 27, 2025	NCR	Radiation (03CH05-KS)
EMI Receiver	R&S	ESCI7	100768	9kHz~7GHz;	Apr. 16, 2025	Aug. 22, 2025	Apr. 15, 2026	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060103	9kHz~30MHz	Aug. 19, 2025	Aug. 22, 2025	Aug. 18, 2026	Conduction (CO01-KS)
AC LISN	MessTec	AN3016	060105	9kHz~30MHz	Dec. 24, 2024	Aug. 22, 2025	Dec. 23, 2025	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP00000 0811	AC 0V~300V, 45Hz~1000Hz	Oct. 09, 2024	Aug. 22, 2025	Oct. 08, 2025	Conduction (CO01-KS)
Signal Analyzer	R&S	FSV7	101472	10Hz~7GHz	Jan. 02, 2025	Jul. 10, 2025~ Sep. 03, 2025	Jan. 01, 2026	CBP (DFS01-KS)
MXG-B RF Vector Signal Genertor	Keysight	5182B /5182BX07	MY562004 17 /MY59360 210	9kHz~7.2GHz	Apr. 16, 2025	Jul. 10, 2025~ Sep. 03, 2025	Apr. 15, 2026	CBP (DFS01-KS)
Vector Signal Generator	R&S	SMJ100A	101908	100kHz~6GHz	Jan. 02, 2025	Jul. 10, 2025~ Sep. 03, 2025	Jan. 01, 2026	CBP (DFS01-KS)
Combiner	MTJ Cooperation	MTJ7112	N/A	0.4-6GHz	NCR	Jul. 10, 2025~ Sep. 03, 2025	NCR	CBP (DFS01-KS)

NCR: No Calibration Required

5 Measurement Uncertainty

Uncertainty of Conducted Measurement

Conducted Spurious Emission & Bandedge	±2.00 dB
Occupied Channel Bandwidth	±0.384%
Conducted Power	±0.90 dB
Conducted Power Spectral Density	±0.90 dB
Frequency	±0.38 Hz
Conducted Generated signal Levels	±0.56 dB
Conducted Time	0.44%

Uncertainty of AC Conducted Emission Measurement (0.15 MHz ~ 30 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.84dB
---	--------

Uncertainty of Radiated Emission Measurement (9 KHz ~ 30 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.30 dB
---	---------

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	6.18 dB
---	---------

Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.88 dB
---	---------

Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.36 dB
---	---------

----- THE END -----



Appendix A. Conducted Test Results



Emission Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	26dB EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11BE320MIMO	Ant6	6105	348.19	5929.00	6277.19	---	---
	Ant7	6105	346.67	5929.76	6276.43	---	---
	Ant6	6265	344.38	6091.29	6435.67	---	---
	Ant7	6265	348.19	6090.52	6438.71	---	---
	Ant6	6425	345.14	6250.52	6595.67	---	---
	Ant7	6425	423.62	6173.57	6597.19	---	---
	Ant6	6585	345.90	6411.29	6757.19	---	---
	Ant7	6585	426.67	6329.76	6756.43	---	---
	Ant6	6745	426.67	6489.00	6915.67	---	---
	Ant7	6745	424.38	6492.81	6917.19	---	---
	Ant6	6905	413.71	6663.48	7077.19	---	---
	Ant7	6905	448.76	6633.00	7217.38	---	---
11A-CDD	Ant6	5955	23.76	5942.81	5966.57	320	PASS
	Ant7	5955	22.90	5943.62	5966.52	320	PASS
	Ant6	6195	23.95	6182.52	6206.48	320	PASS
	Ant7	6195	23.14	6183.38	6206.52	320	PASS
	Ant6	6415	23.95	6402.52	6426.48	320	PASS
	Ant7	6415	22.29	6404.00	6426.29	320	PASS
	Ant6	6435	24.00	6422.71	6446.71	320	PASS
	Ant7	6435	22.57	6423.90	6446.48	320	PASS
	Ant6	6475	23.90	6462.81	6486.71	320	PASS
	Ant7	6475	22.71	6463.86	6486.57	320	PASS
	Ant6	6515	23.81	6502.71	6526.52	320	PASS
	Ant7	6515	22.67	6503.76	6526.43	320	PASS
	Ant6	6535	23.76	6522.62	6546.38	320	PASS
	Ant7	6535	23.00	6523.57	6546.57	320	PASS
	Ant6	6695	23.81	6682.71	6706.52	320	PASS
	Ant7	6695	23.00	6683.57	6706.57	320	PASS
	Ant6	6855	23.57	6842.76	6866.33	320	PASS
	Ant7	6855	22.71	6843.81	6866.52	320	PASS
	Ant6	6875	24.14	6862.57	6886.71	320	PASS
	Ant7	6875	22.95	6863.48	6886.43	320	PASS
	Ant6	6895	23.76	6882.76	6906.52	320	PASS



	Ant7	6895	22.71	6883.76	6906.48	320	PASS
	Ant6	6995	23.57	6982.81	7006.38	320	PASS
	Ant7	6995	22.76	6983.52	7006.29	320	PASS
	Ant6	7095	24.57	7082.71	7107.29	320	PASS
	Ant7	7095	22.95	7083.86	7106.81	320	PASS
	Ant6	7115	23.81	7102.67	7126.48	320	PASS
	Ant7	7115	23.00	7103.48	7126.48	320	PASS
11BE20MIMO	Ant6	5955	23.71	5943.10	5966.81	320	PASS
	Ant7	5955	23.29	5943.48	5966.76	320	PASS
	Ant6	6195	23.24	6183.29	6206.52	320	PASS
	Ant7	6195	23.57	6183.19	6206.76	320	PASS
	Ant6	6415	23.57	6402.95	6426.52	320	PASS
	Ant7	6415	23.48	6403.10	6426.57	320	PASS
	Ant6	6435	23.71	6423.29	6447.00	320	PASS
	Ant7	6435	23.48	6423.29	6446.76	320	PASS
	Ant6	6475	23.33	6463.19	6486.52	320	PASS
	Ant7	6475	23.33	6463.24	6486.57	320	PASS
	Ant6	6515	23.00	6503.43	6526.43	320	PASS
	Ant7	6515	23.52	6503.14	6526.67	320	PASS
	Ant6	6535	23.95	6523.05	6547.00	320	PASS
	Ant7	6535	23.57	6523.19	6546.76	320	PASS
	Ant6	6695	23.48	6683.19	6706.67	320	PASS
	Ant7	6695	23.48	6683.14	6706.62	320	PASS
	Ant6	6855	23.52	6842.95	6866.48	320	PASS
	Ant7	6855	23.48	6843.24	6866.71	320	PASS
	Ant6	6875	23.38	6863.10	6886.48	320	PASS
	Ant7	6875	23.52	6862.95	6886.48	320	PASS
	Ant6	6895	23.43	6883.24	6906.67	320	PASS
	Ant7	6895	23.57	6883.24	6906.81	320	PASS
	Ant6	6995	23.38	6983.43	7006.81	320	PASS
	Ant7	6995	23.33	6983.19	7006.52	320	PASS
	Ant6	7095	23.19	7083.43	7106.62	320	PASS
	Ant7	7095	24.19	7082.76	7106.95	320	PASS
	Ant6	7115	23.33	7103.19	7126.52	320	PASS
	Ant7	7115	23.71	7102.95	7126.67	320	PASS
11BE40MIMO	Ant6	5965	43.90	5943.29	5987.19	320	PASS
	Ant7	5965	43.24	5943.57	5986.81	320	PASS
	Ant6	6205	44.10	6183.10	6227.19	320	PASS
	Ant7	6205	43.52	6183.19	6226.71	320	PASS



	Ant6	6405	43.71	6383.00	6426.71	320	PASS
	Ant7	6405	43.33	6383.48	6426.81	320	PASS
	Ant6	6445	42.95	6423.57	6466.52	320	PASS
	Ant7	6445	42.67	6423.57	6466.24	320	PASS
	Ant6	6485	44.19	6463.00	6507.19	320	PASS
	Ant7	6485	43.05	6463.48	6506.52	320	PASS
	Ant6	6525	43.24	6503.38	6546.62	320	PASS
	Ant7	6525	42.86	6503.67	6546.52	320	PASS
	Ant6	6565	43.90	6542.81	6586.71	320	PASS
	Ant7	6565	43.24	6543.48	6586.71	320	PASS
	Ant6	6685	43.43	6663.29	6706.71	320	PASS
	Ant7	6685	43.33	6663.29	6706.62	320	PASS
	Ant6	6845	43.24	6823.19	6866.43	320	PASS
	Ant7	6845	43.05	6823.29	6866.33	320	PASS
	Ant6	6885	43.81	6863.10	6906.90	320	PASS
	Ant7	6885	43.90	6863.00	6906.90	320	PASS
	Ant6	6925	43.52	6903.38	6946.90	320	PASS
	Ant7	6925	43.05	6903.48	6946.52	320	PASS
	Ant6	7005	41.90	6984.33	7026.24	320	PASS
	Ant7	7005	41.81	6984.71	7026.52	320	PASS
11BE80MIMO	Ant6	7085	43.71	7063.19	7106.90	320	PASS
	Ant7	7085	43.52	7063.38	7106.90	320	PASS
	Ant6	5985	86.10	5942.33	6028.43	320	PASS
	Ant7	5985	86.29	5941.57	6027.86	320	PASS
	Ant6	6225	87.24	6181.19	6268.43	320	PASS
	Ant7	6225	86.86	6181.57	6268.43	320	PASS
	Ant6	6385	86.86	6341.19	6428.05	320	PASS
	Ant7	6385	86.10	6341.57	6427.67	320	PASS
	Ant6	6465	86.67	6421.57	6508.24	320	PASS
	Ant7	6465	85.52	6421.95	6507.48	320	PASS
	Ant6	6545	85.33	6501.95	6587.29	320	PASS
	Ant7	6545	85.71	6501.95	6587.67	320	PASS
	Ant6	6625	87.43	6581.19	6668.62	320	PASS
	Ant7	6625	84.95	6582.90	6667.86	320	PASS
	Ant6	6705	87.24	6661.19	6748.43	320	PASS
	Ant7	6705	87.43	6661.00	6748.43	320	PASS
	Ant6	6785	87.24	6741.57	6828.81	320	PASS
	Ant7	6785	86.10	6741.76	6827.86	320	PASS
	Ant6	6865	86.29	6820.81	6907.10	320	PASS

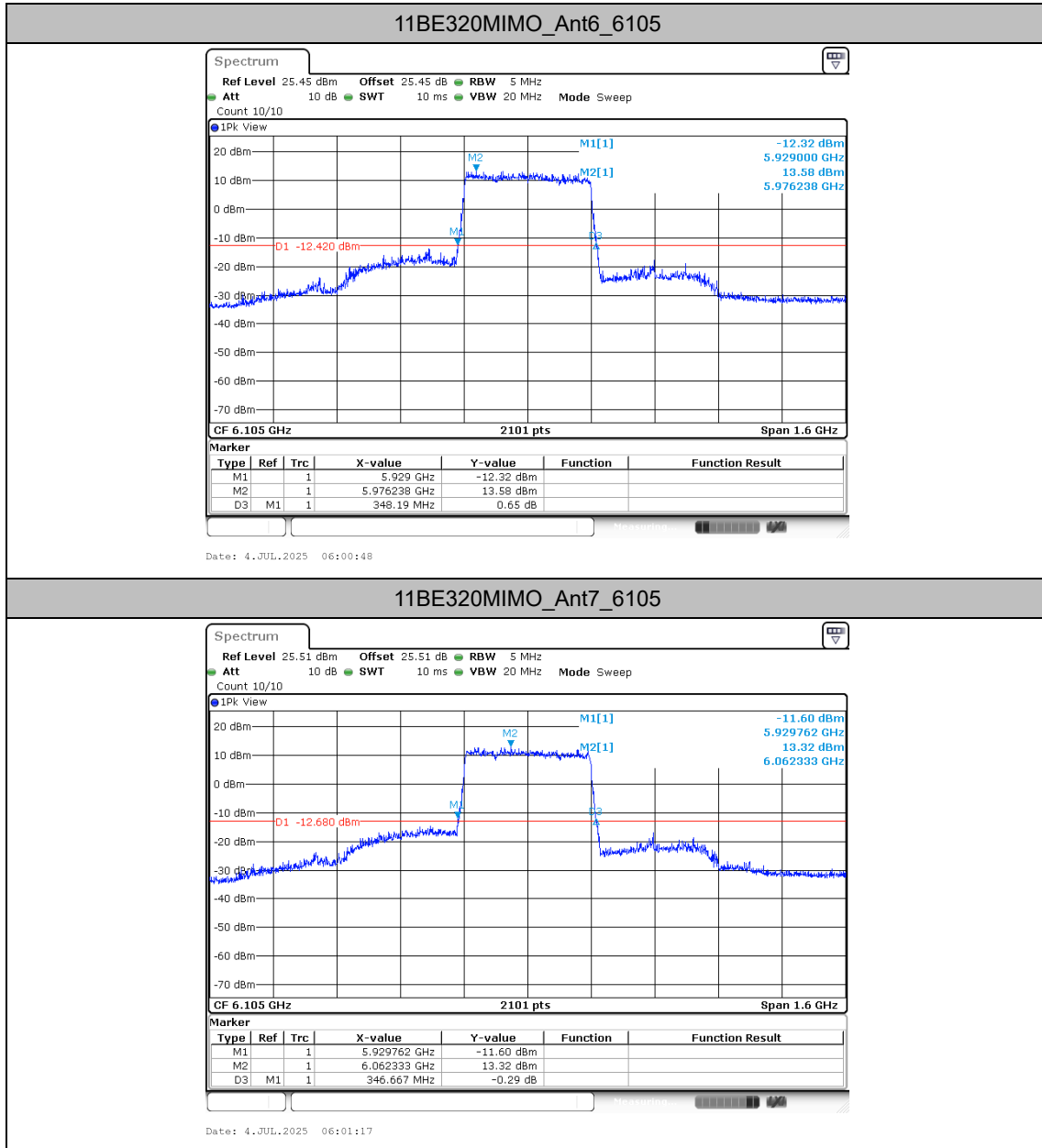
	Ant7	6865	85.71	6821.95	6907.67	320	PASS
	Ant6	6945	85.14	6902.14	6987.29	320	PASS
	Ant7	6945	84.57	6902.52	6987.10	320	PASS
	Ant6	7025	86.10	6982.52	7068.62	320	PASS
	Ant7	7025	84.38	6983.10	7067.48	320	PASS
11BE160MIMO	Ant6	6025	173.71	5938.52	6112.24	320	PASS
	Ant7	6025	176.00	5936.24	6112.24	320	PASS
	Ant6	6185	176.76	6097.38	6274.14	320	PASS
	Ant7	6185	174.48	6097.76	6272.24	320	PASS
	Ant6	6345	177.14	6256.62	6433.76	320	PASS
	Ant7	6345	173.33	6258.52	6431.86	320	PASS
	Ant6	6505	174.86	6417.76	6592.62	320	PASS
	Ant7	6505	174.86	6417.00	6591.86	320	PASS
	Ant6	6665	174.48	6577.76	6752.24	320	PASS
	Ant7	6665	176.00	6576.24	6752.24	320	PASS
	Ant6	6825	171.81	6738.14	6909.95	320	PASS
	Ant7	6825	172.95	6738.90	6911.86	320	PASS
	Ant6	6985	173.33	6899.29	7072.62	320	PASS
	Ant7	6985	173.71	6898.14	7071.86	320	PASS

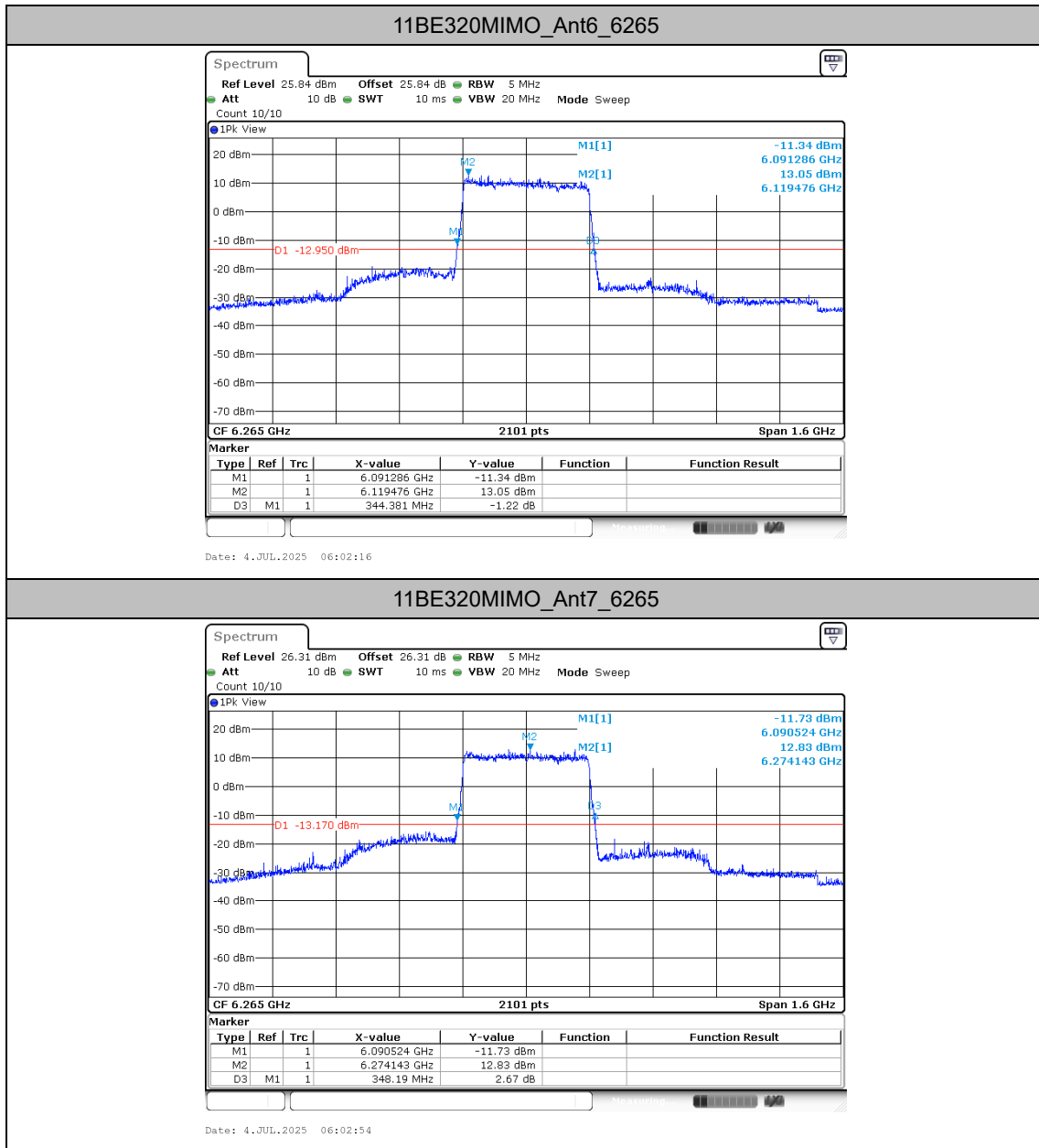
Note1: For channels with a nominal bandwidth of 320MHz, compliance is demonstrated by way of the 99%BW.

Note2: For channels with a nominal bandwidth less than 320MHz(e.g 20,40,80,160MHz), compliance is demonstrated by way of the 26dB EBW.



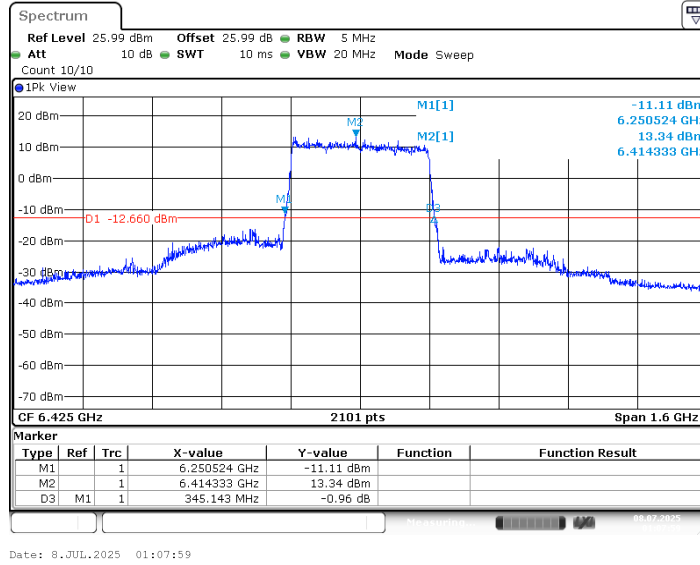
Test Graphs



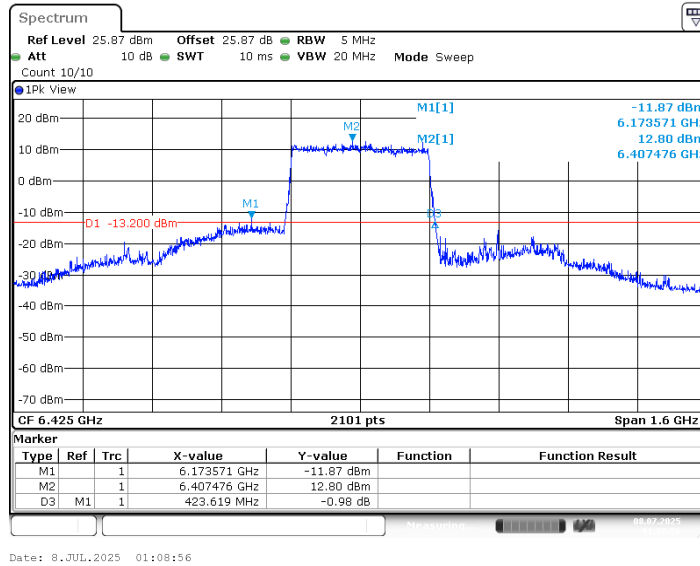




11BE320MIMO_Ant6_6425

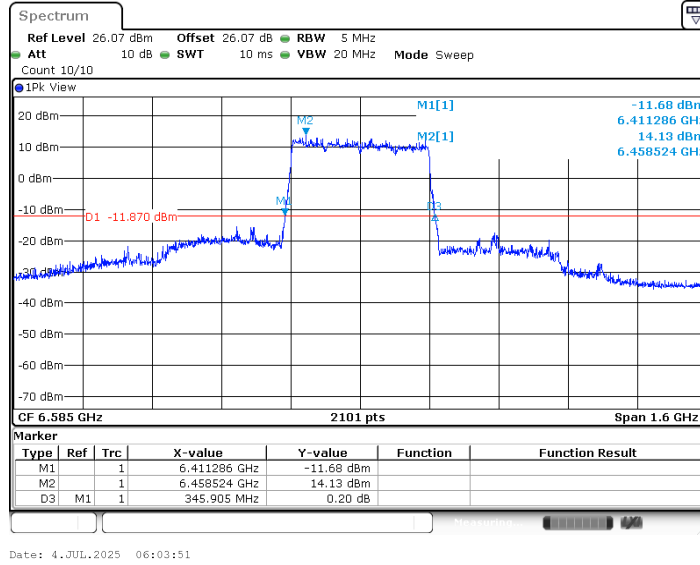


11BE320MIMO_Ant7_6425

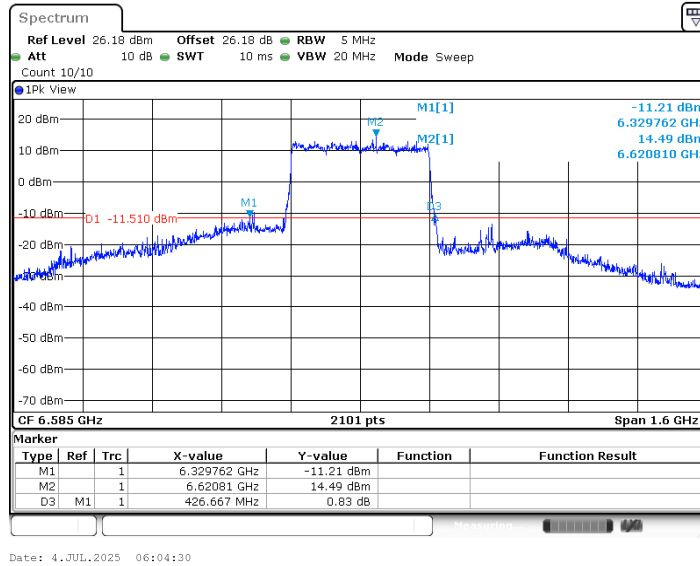




11BE320MIMO_Ant6_6585

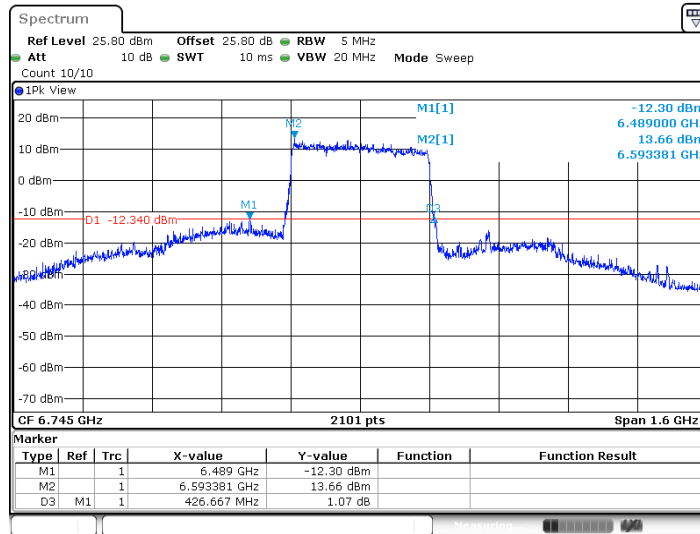


11BE320MIMO_Ant7_6585

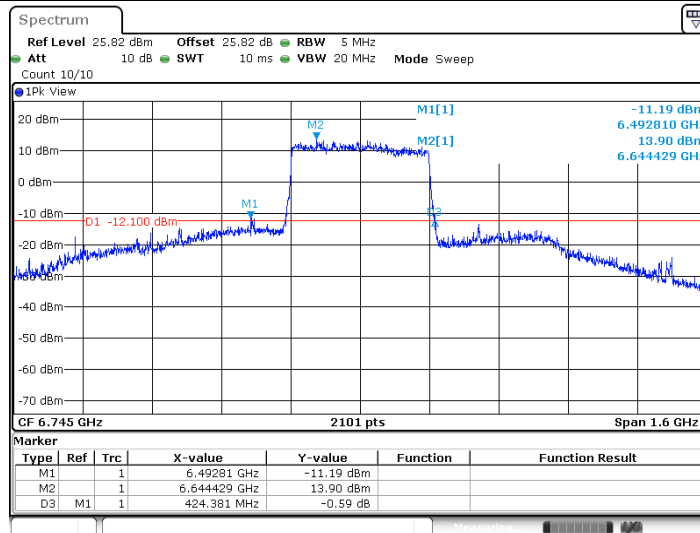


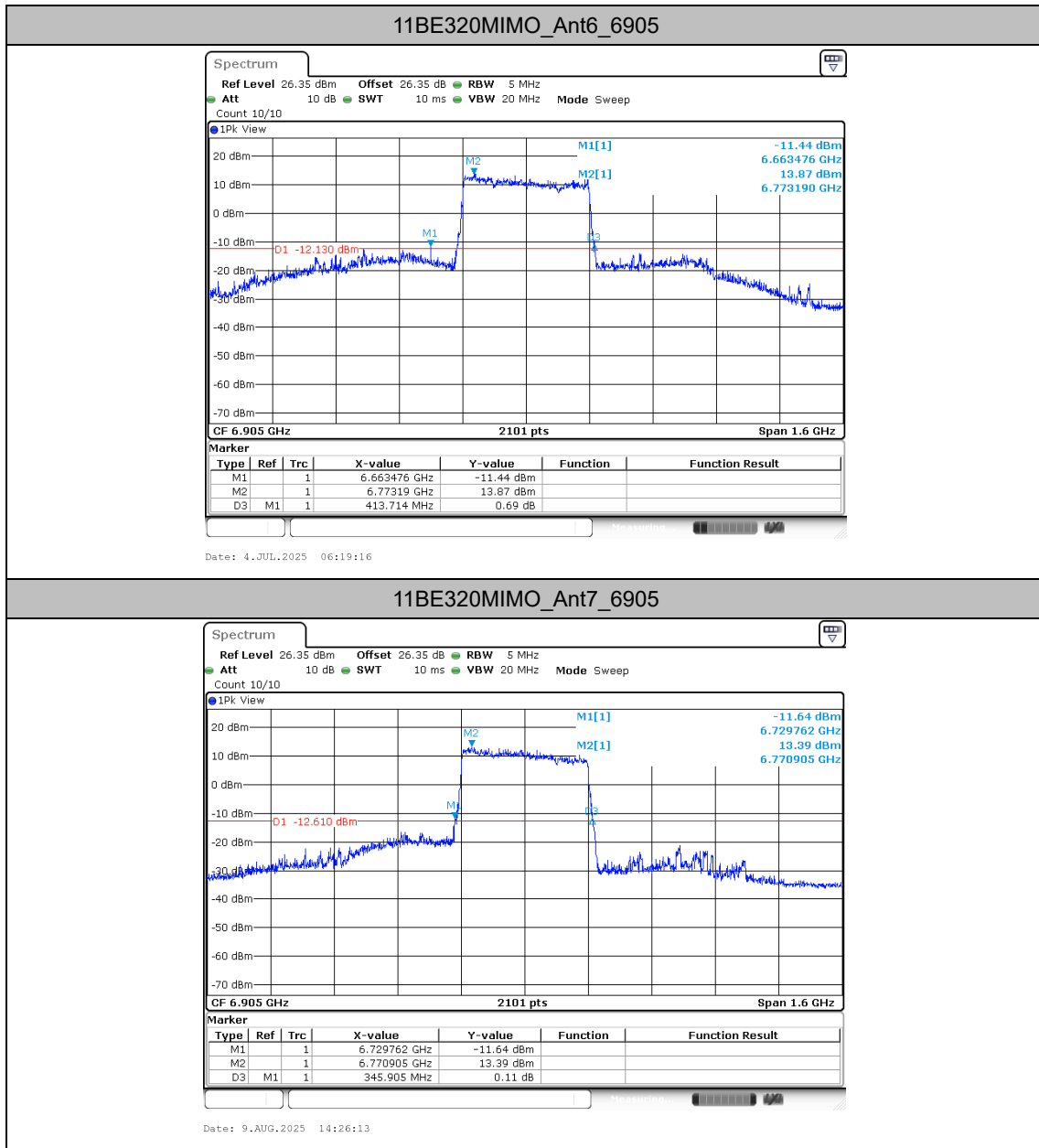


11BE320MIMO_Ant6_6745



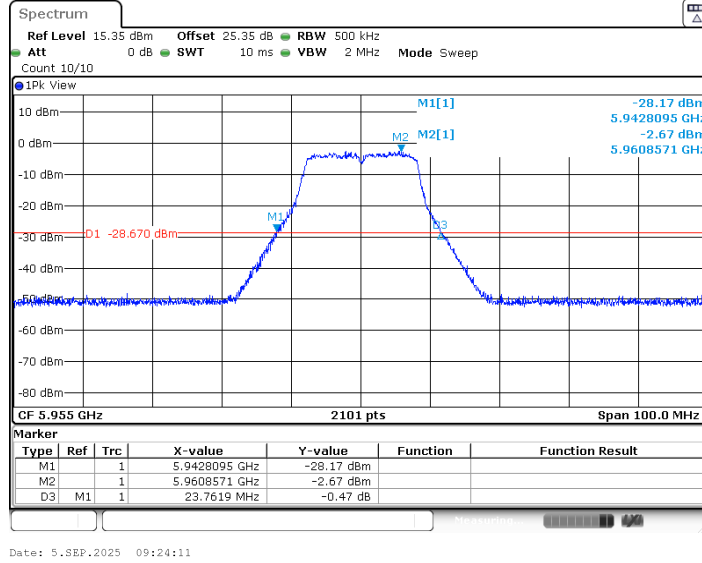
11BE320MIMO_Ant7_6745



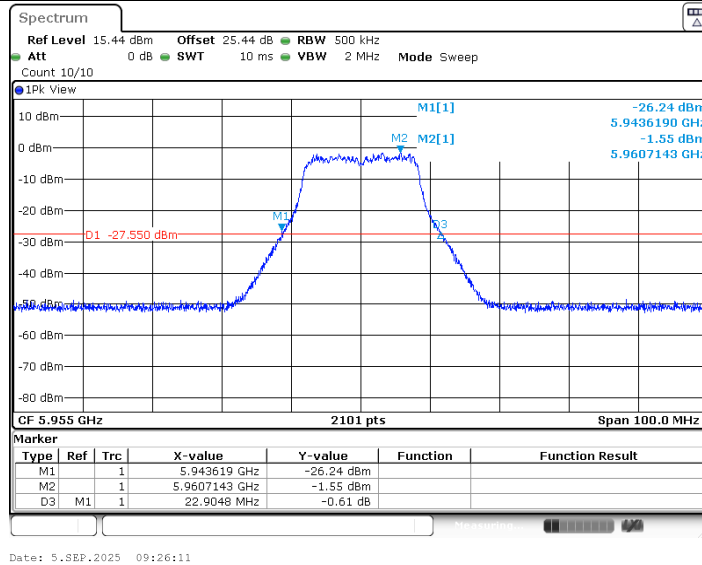


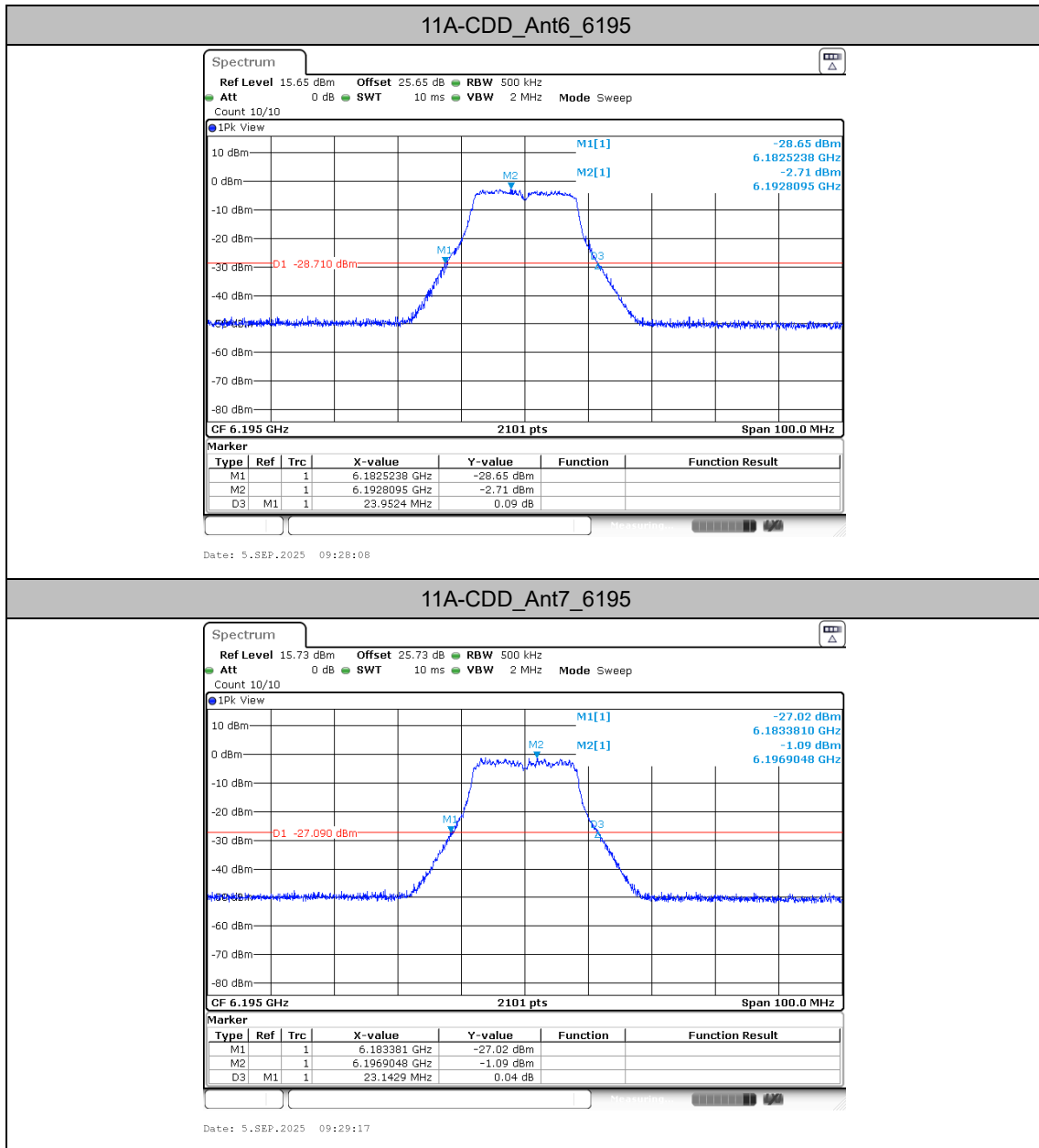


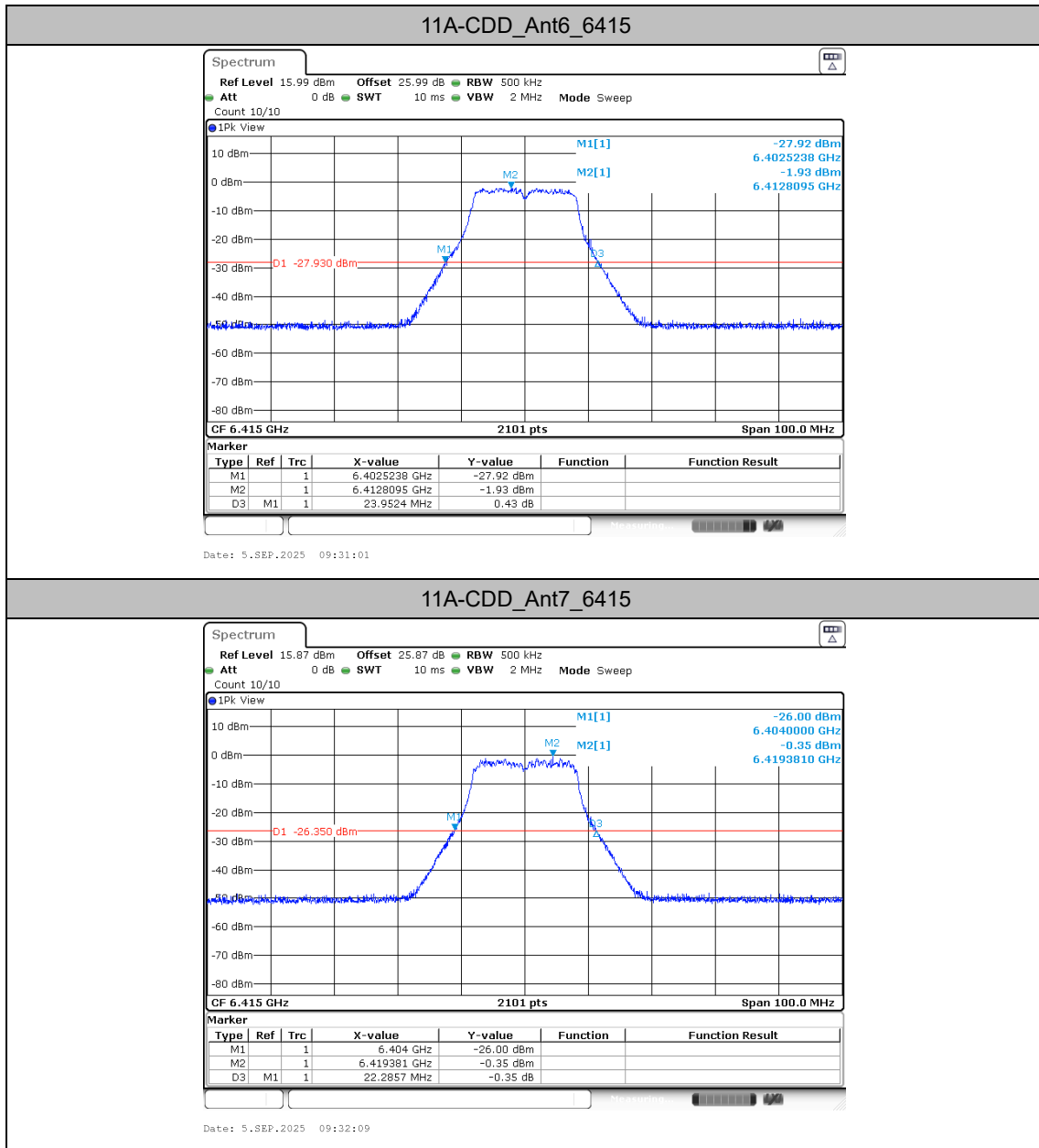
11A-CDD_Ant6_5955

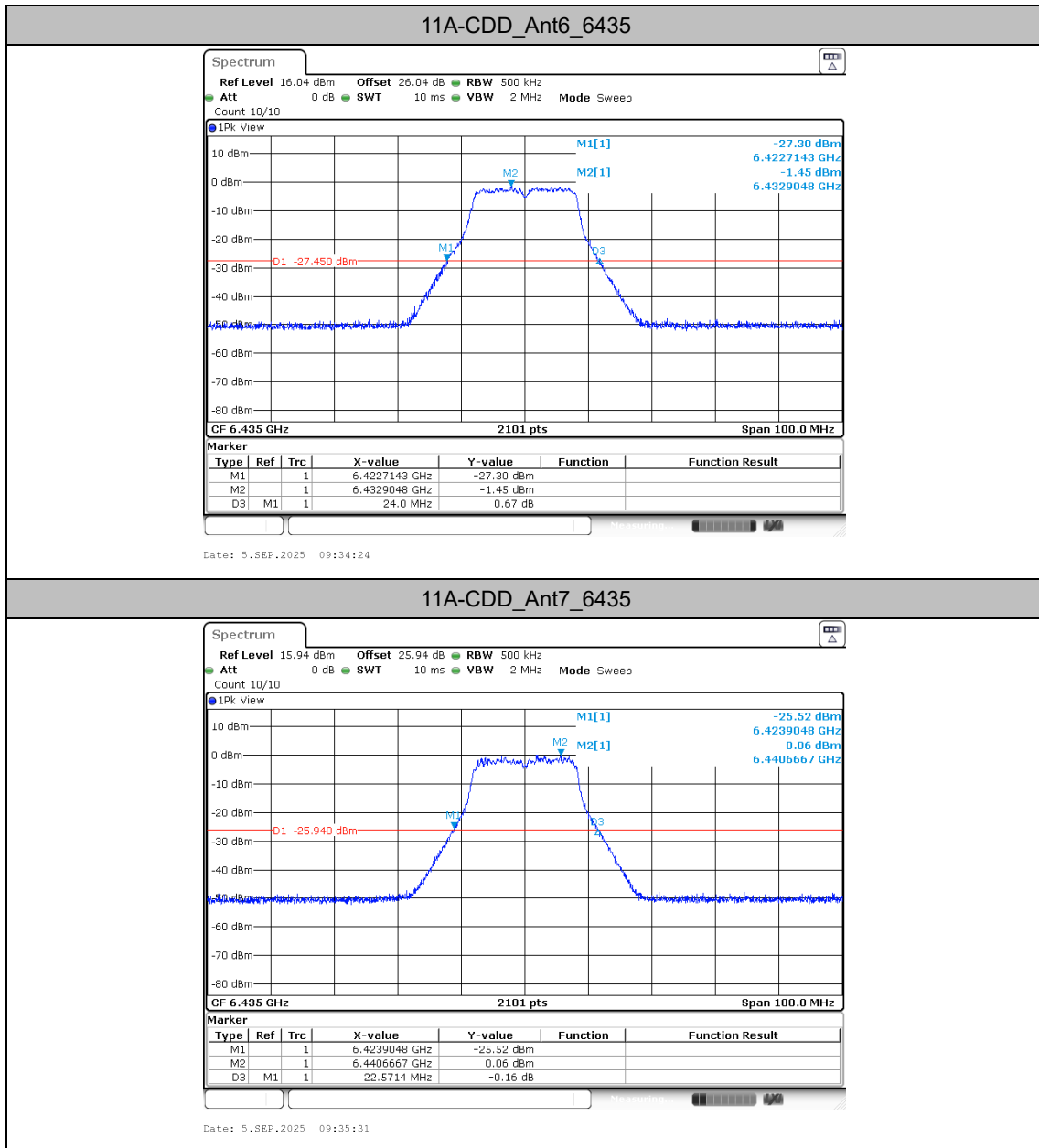


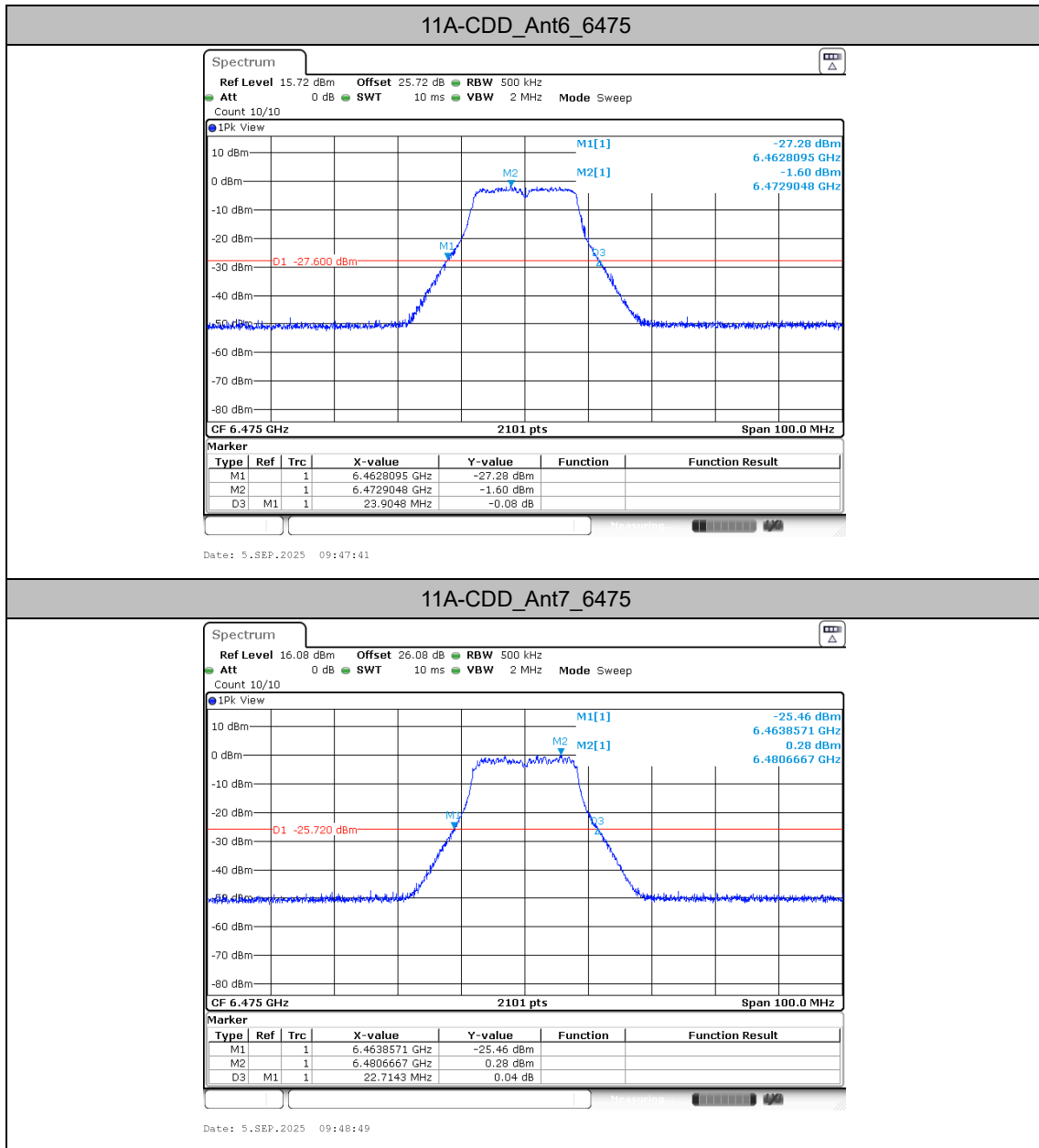
11A-CDD_Ant7_5955

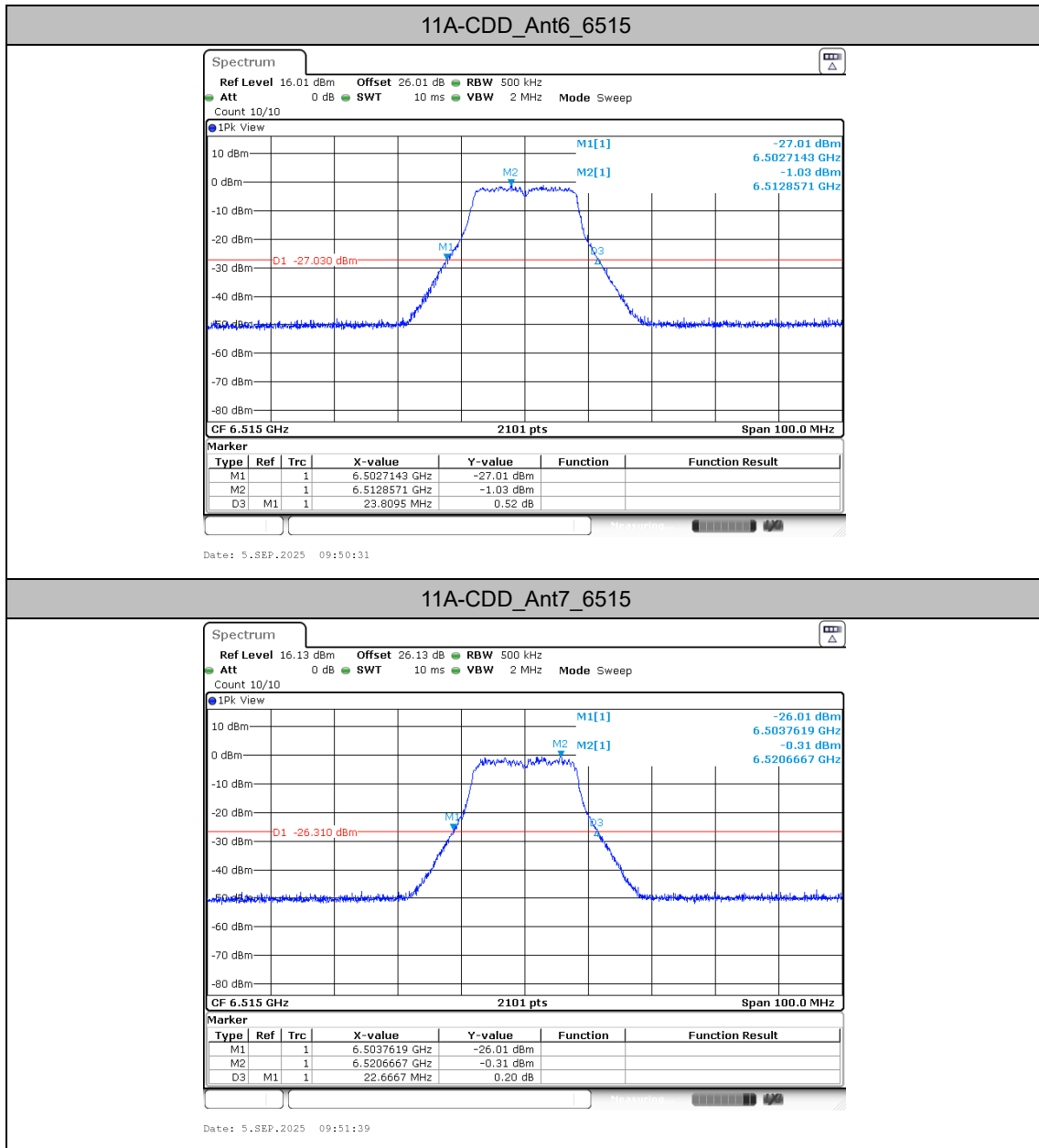






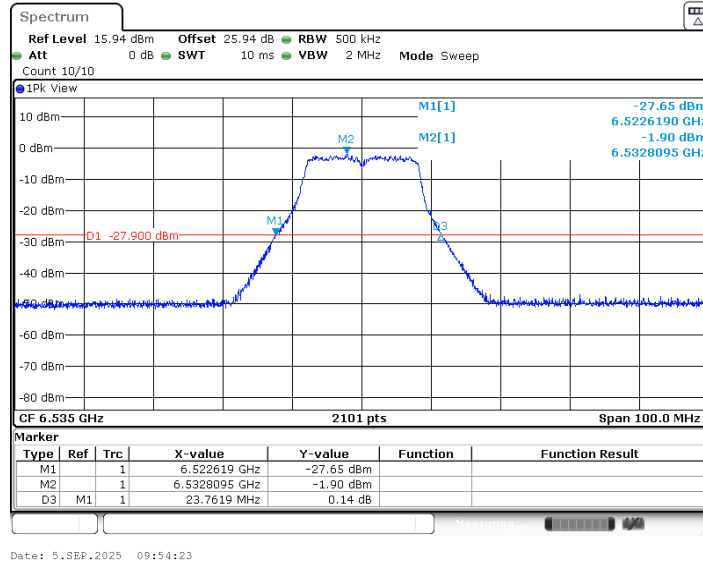




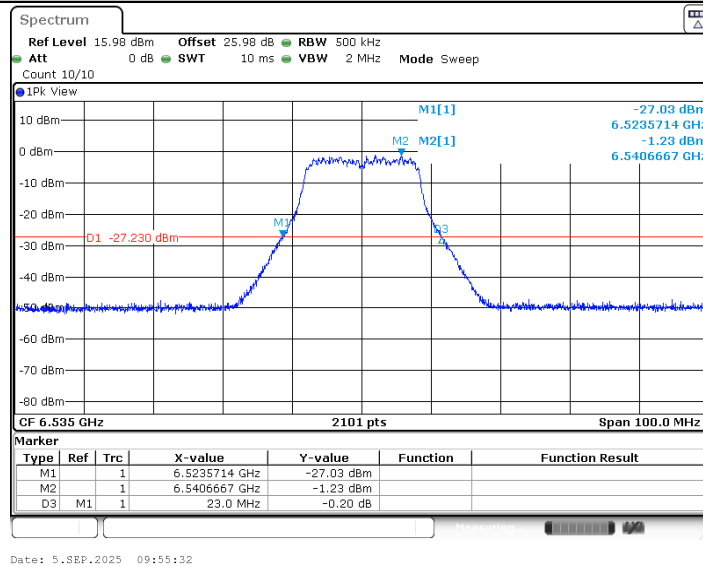


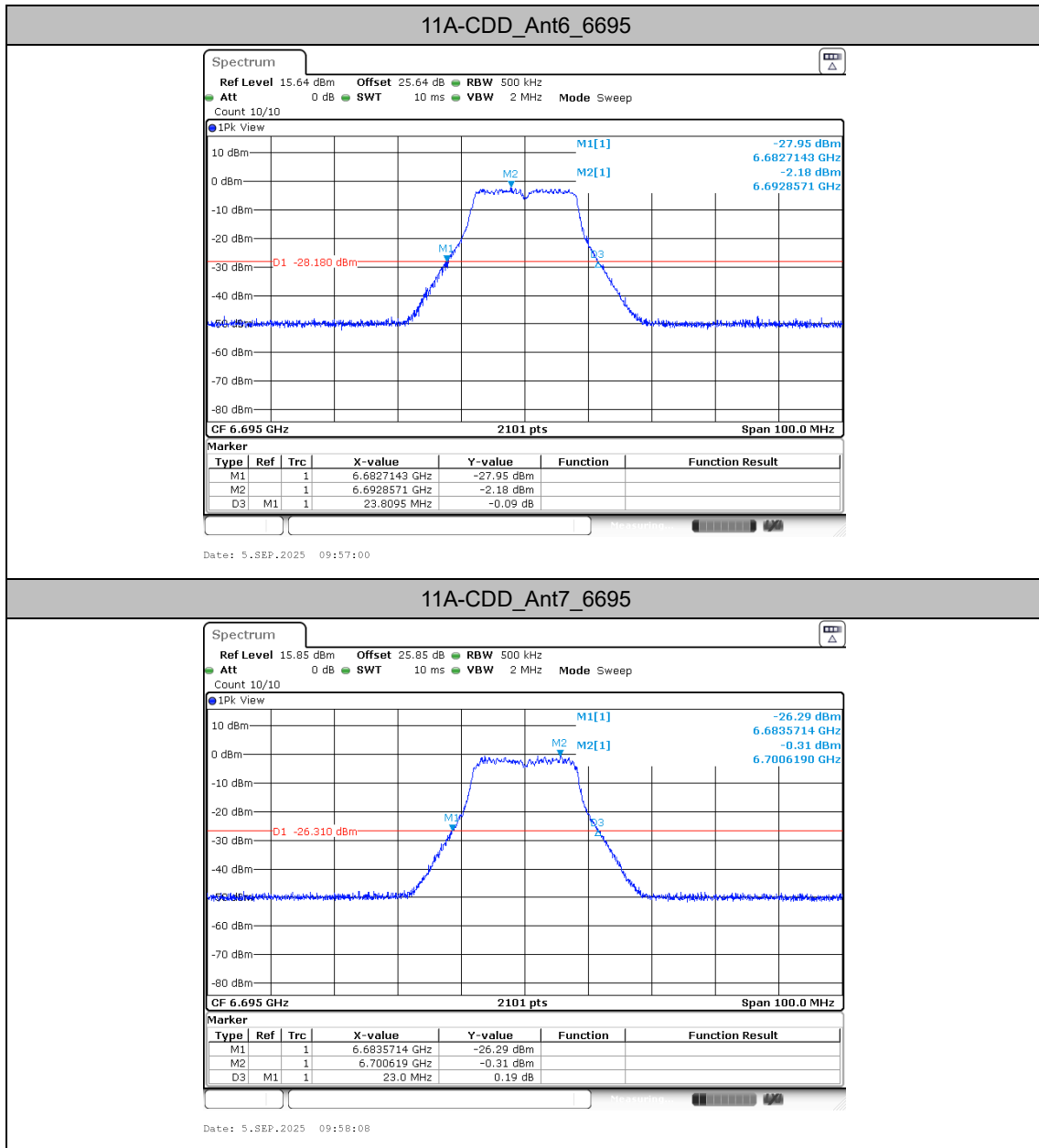


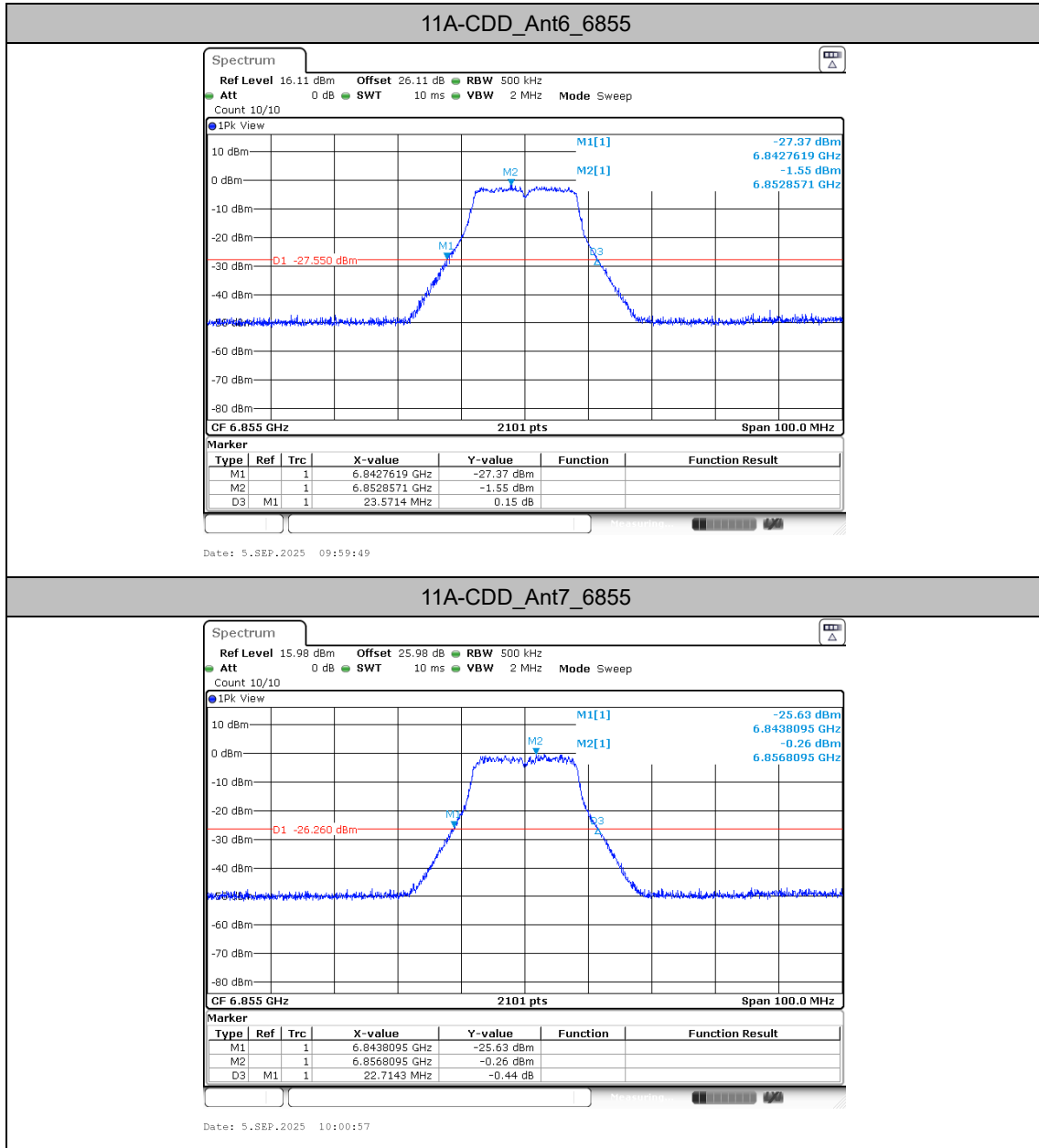
11A-CDD_Ant6_6535



11A-CDD_Ant7_6535

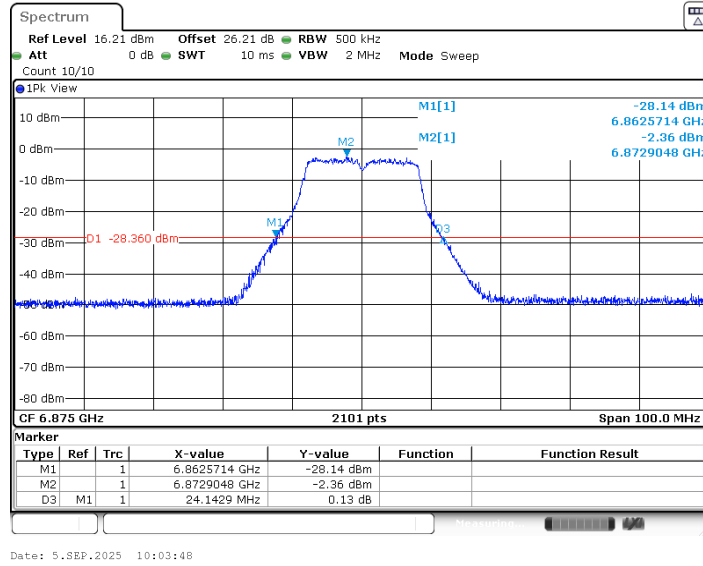




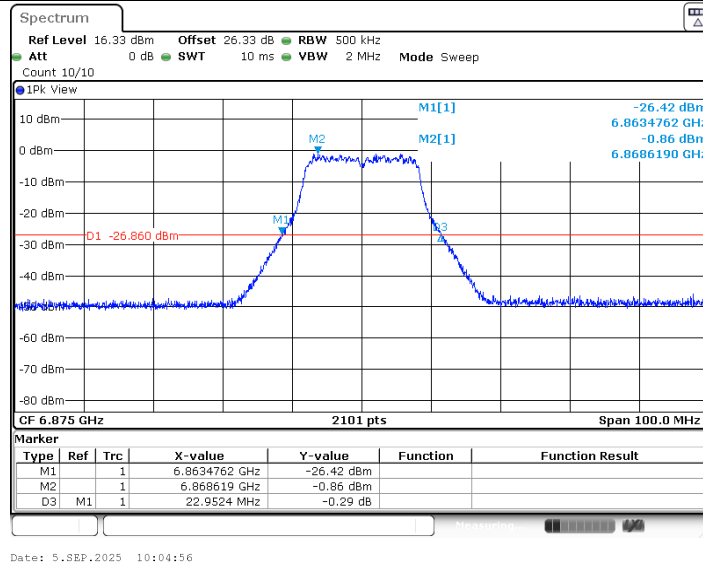




11A-CDD_Ant6_6875

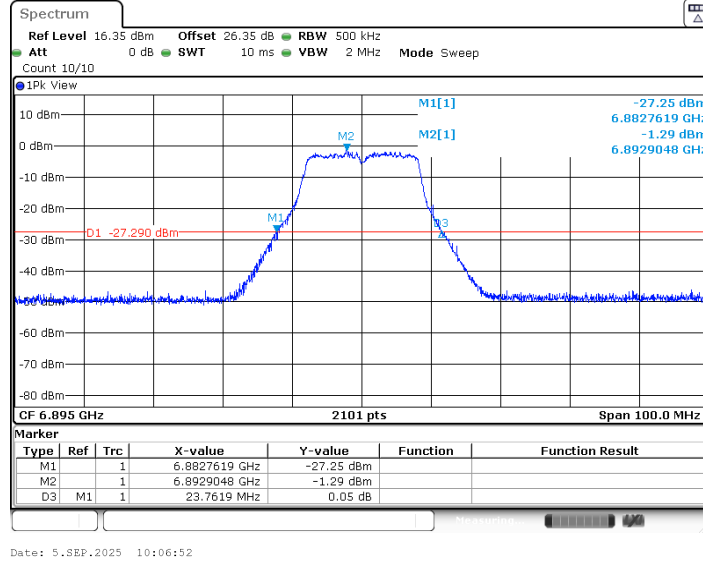


11A-CDD_Ant7_6875

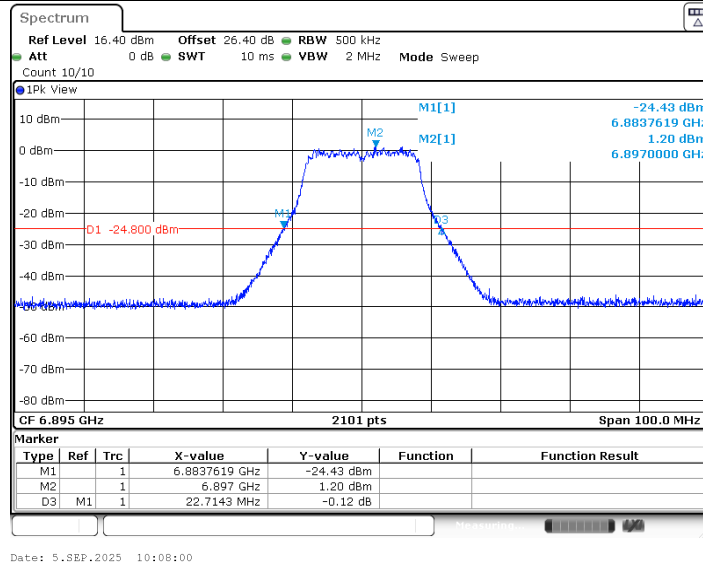


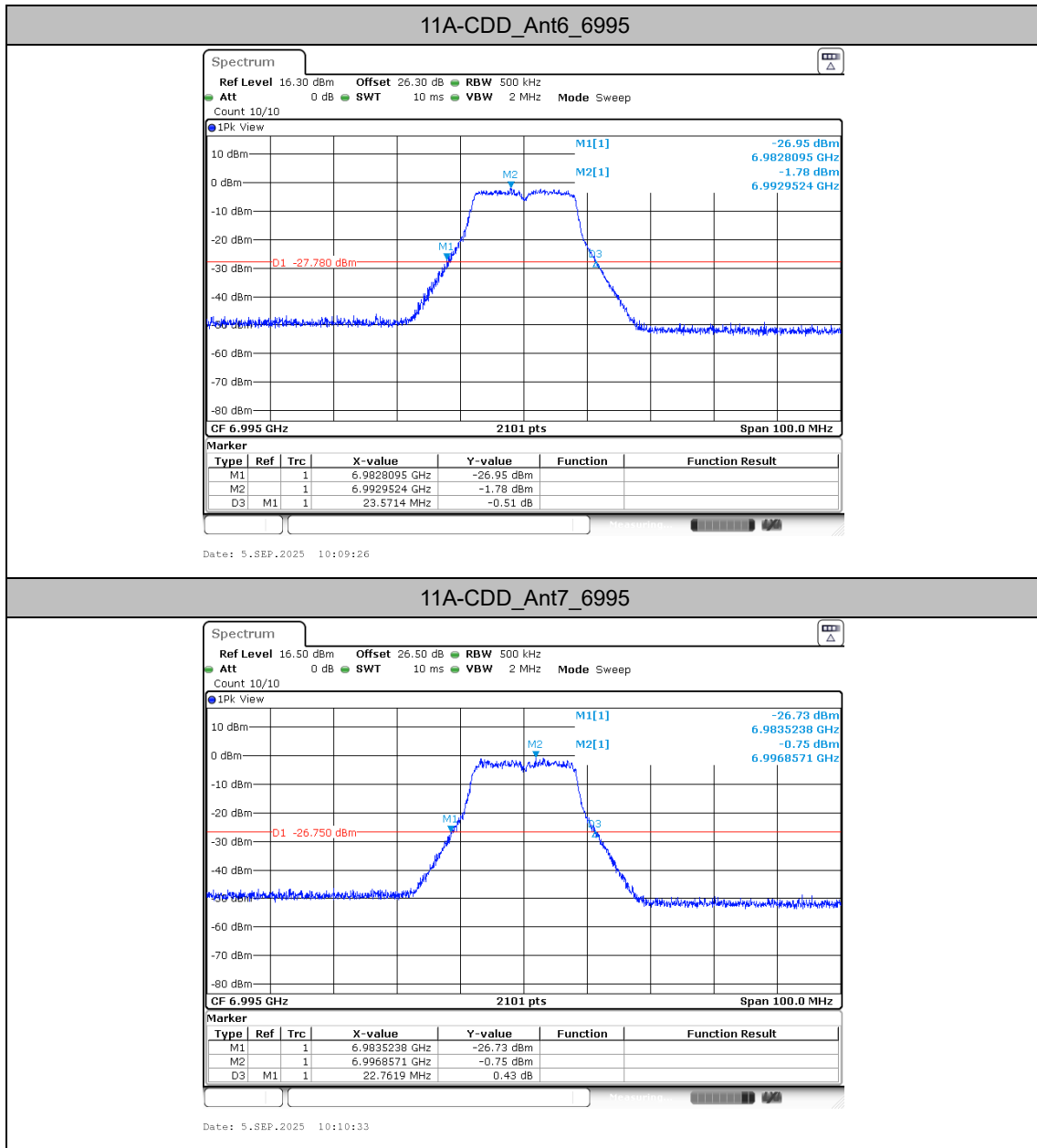


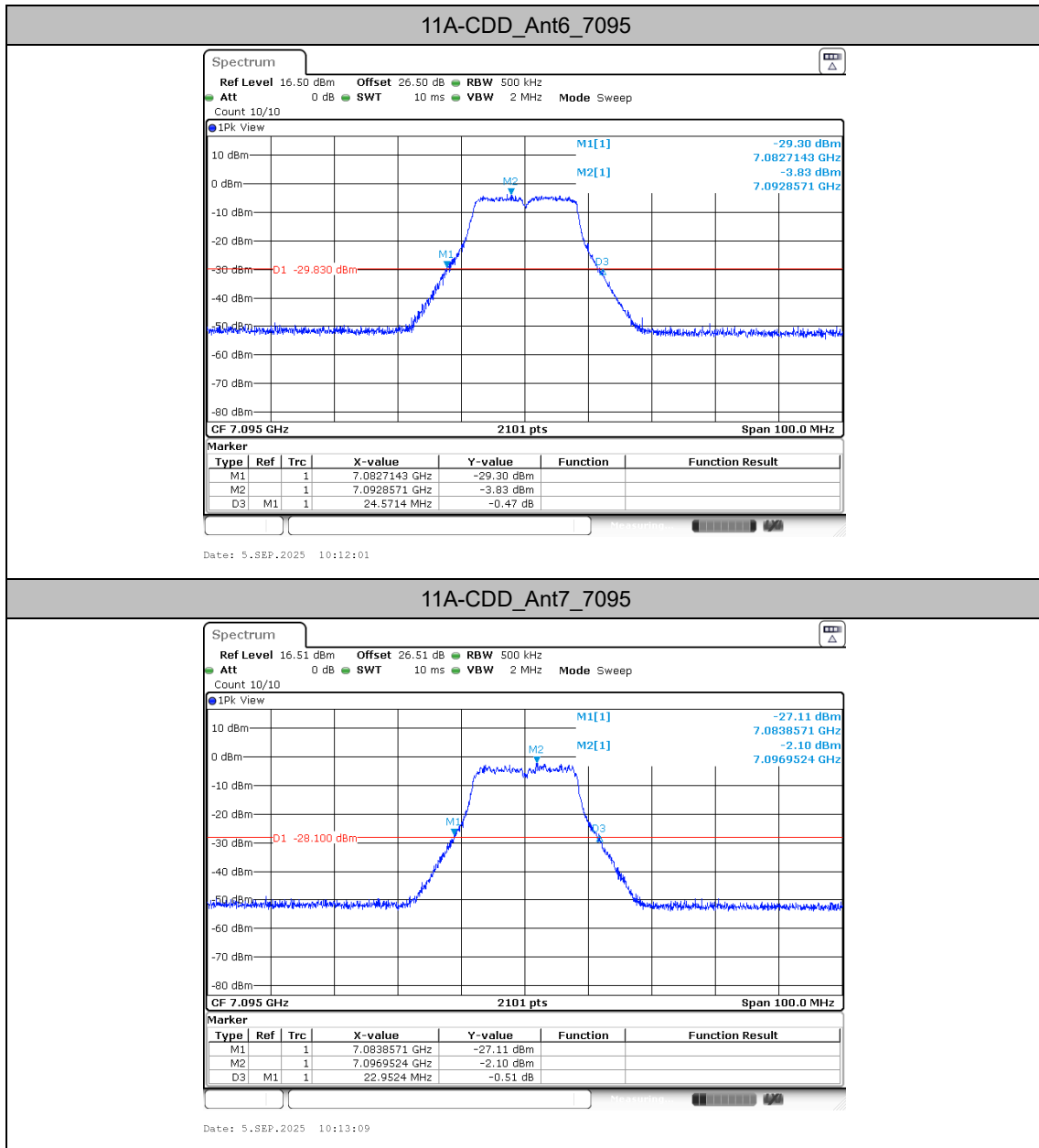
11A-CDD_Ant6_6895

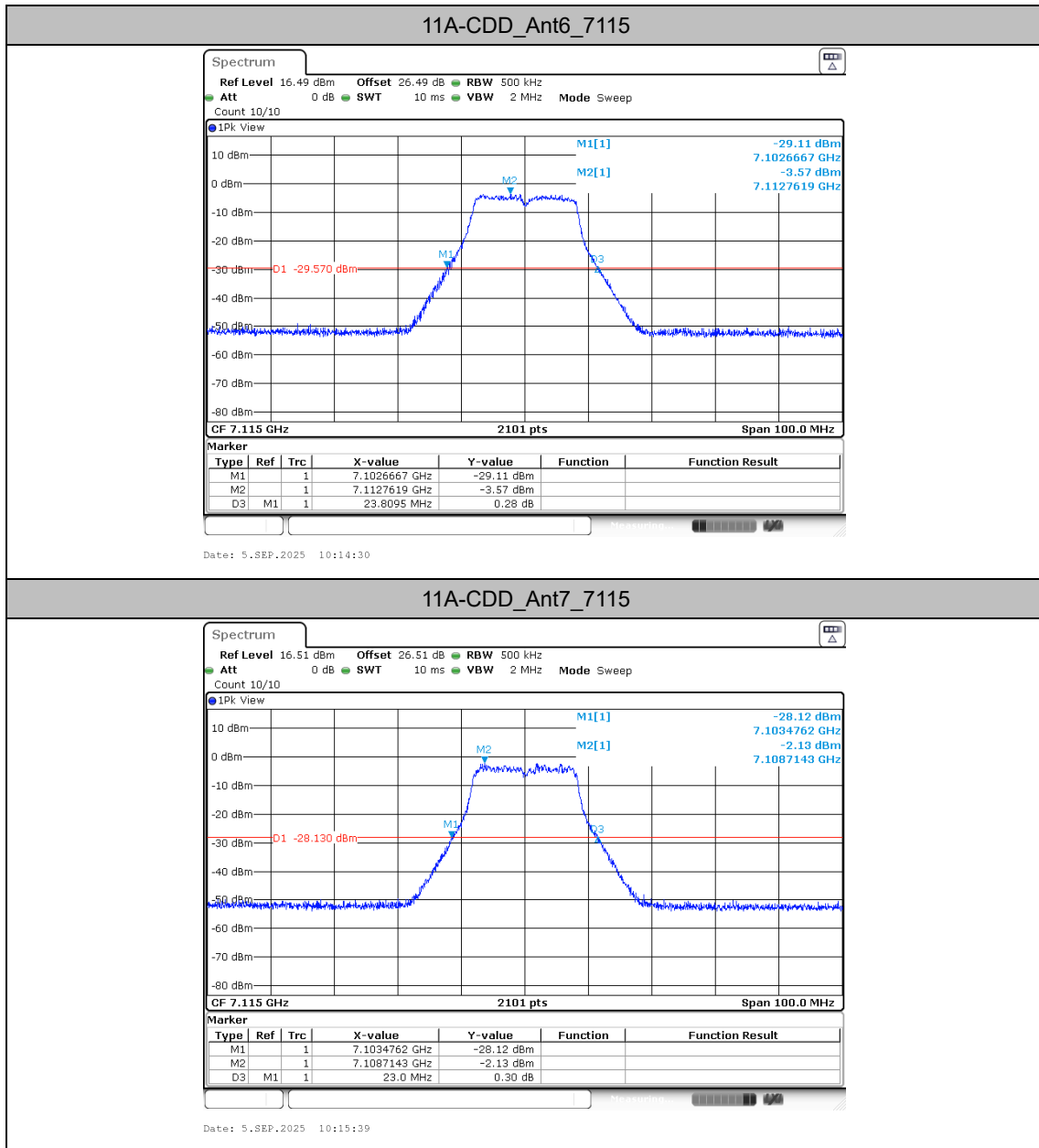


11A-CDD_Ant7_6895



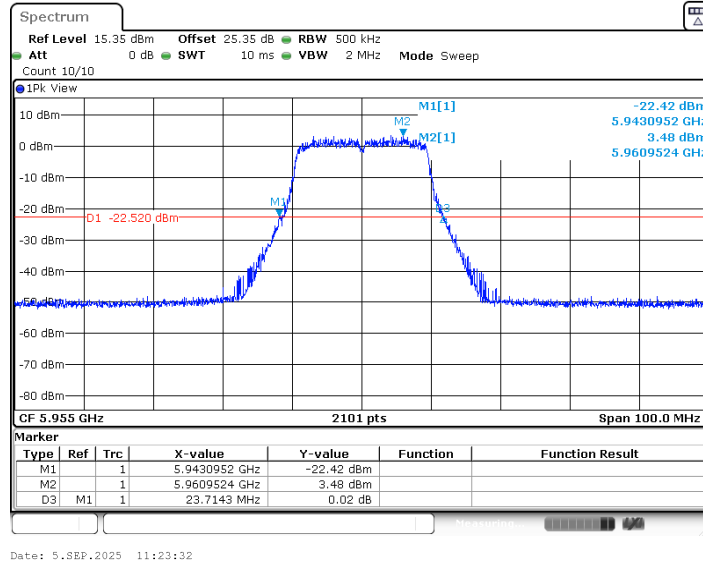




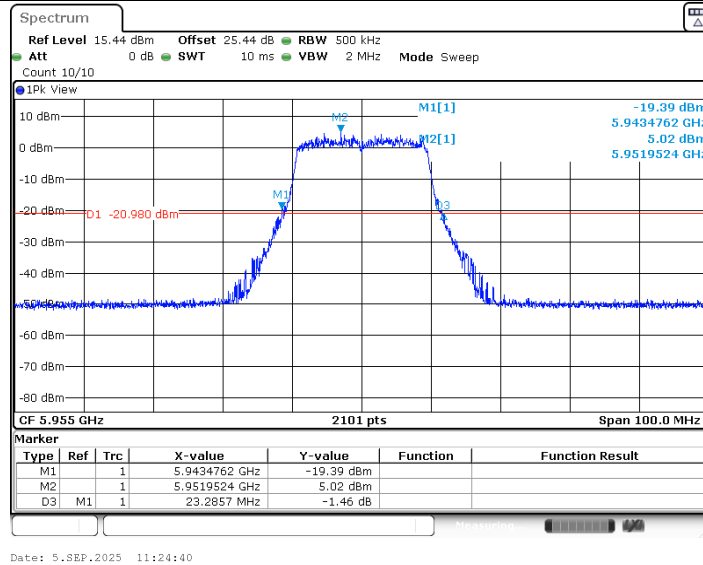


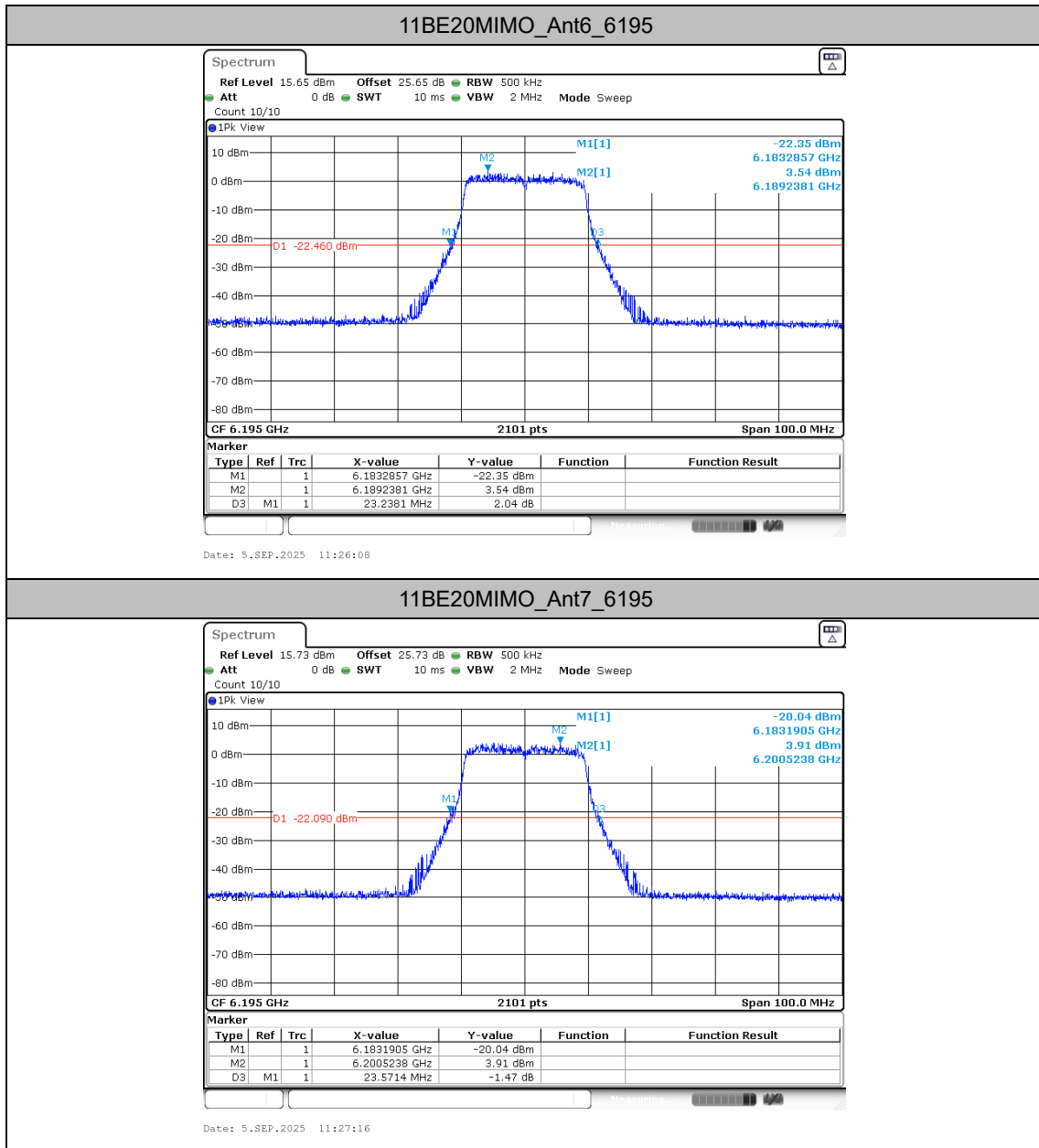


11BE20MIMO_Ant6_5955



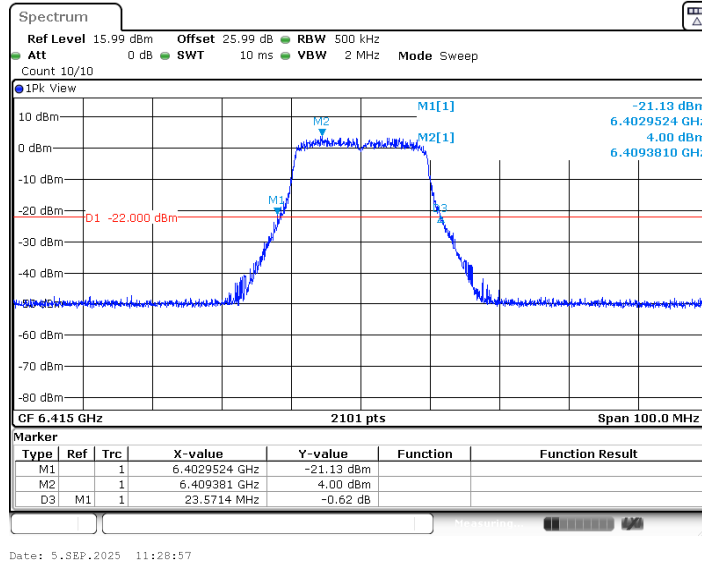
11BE20MIMO_Ant7_5955



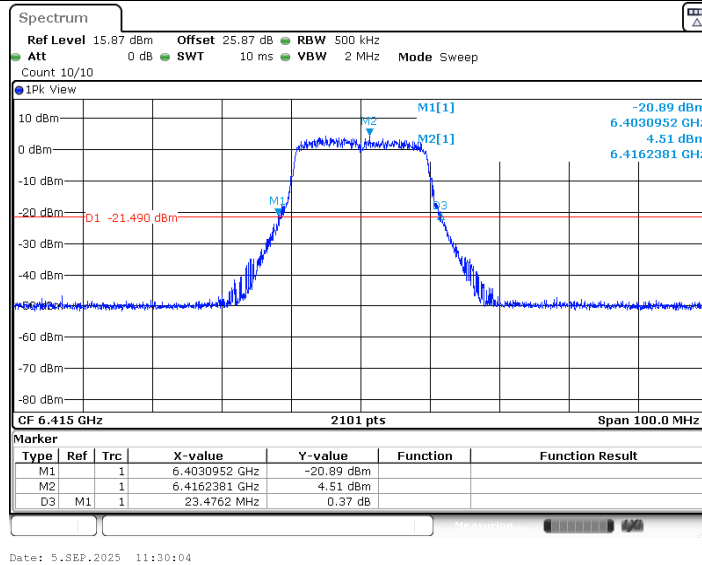




11BE20MIMO_Ant6_6415

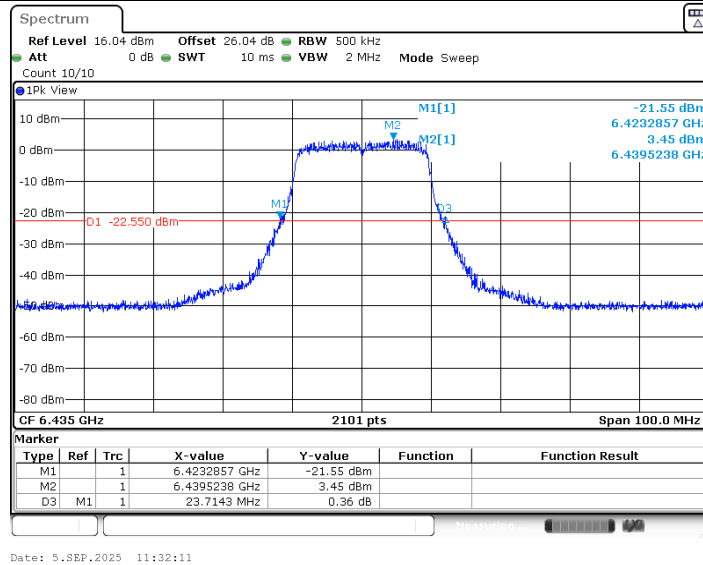


11BE20MIMO_Ant7_6415

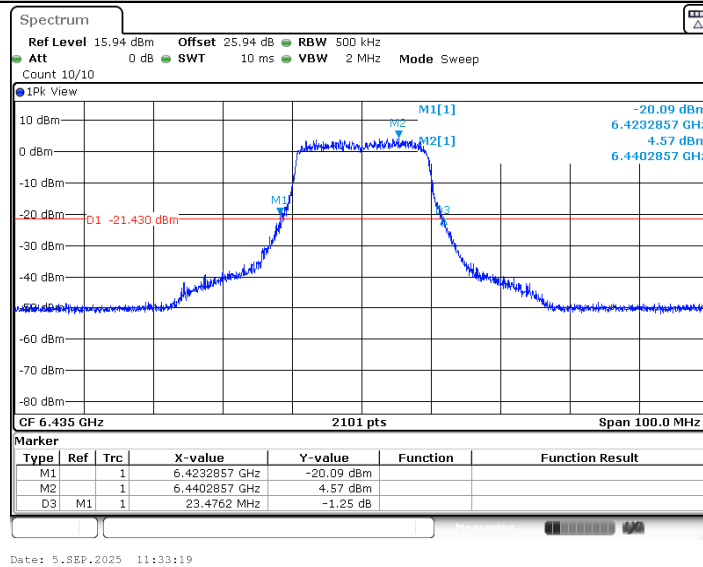




11BE20MIMO_Ant6_6435

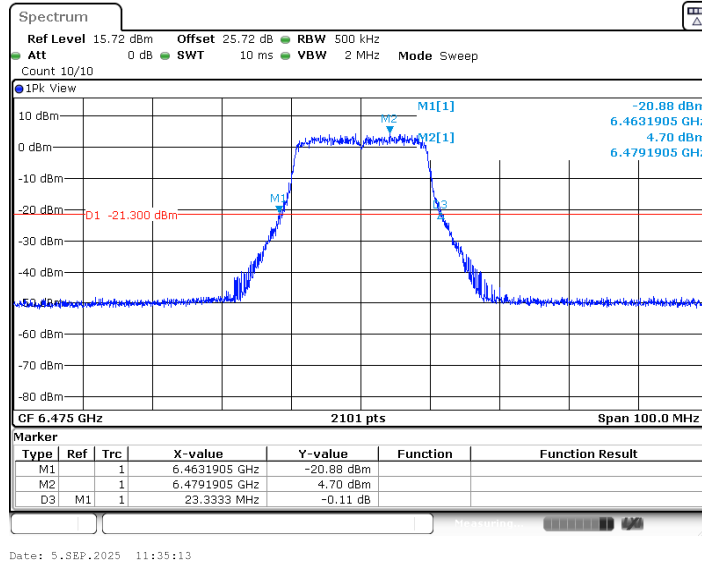


11BE20MIMO_Ant7_6435

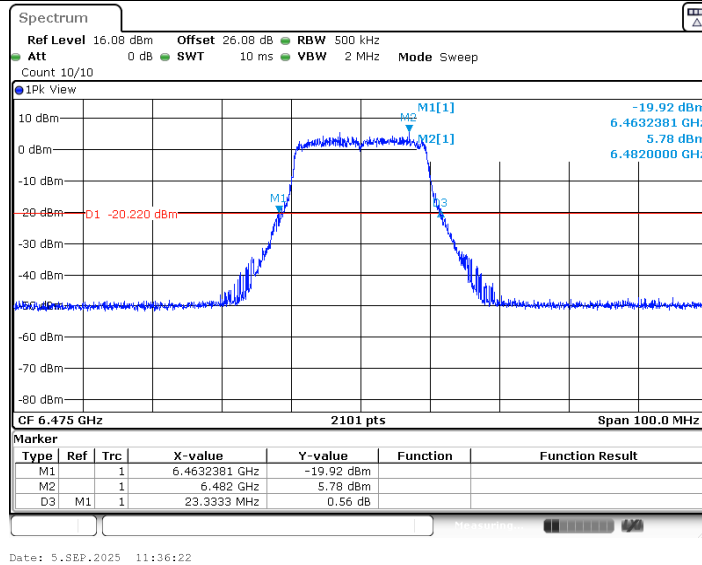




11BE20MIMO_Ant6_6475

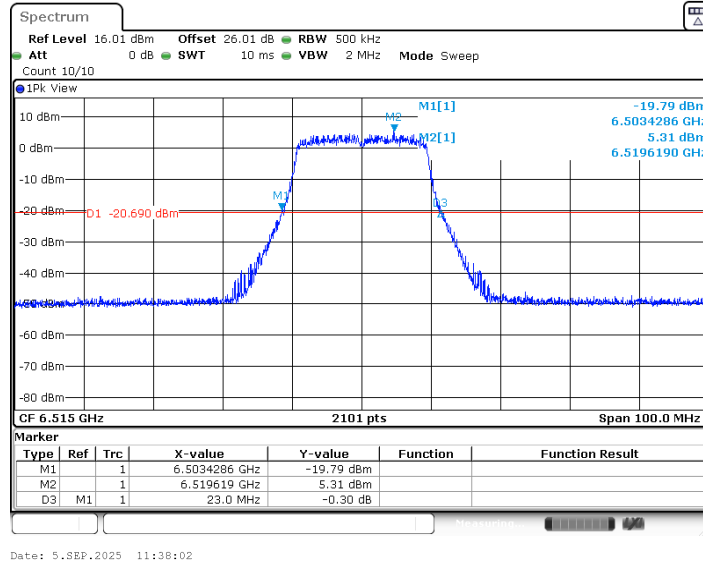


11BE20MIMO_Ant7_6475

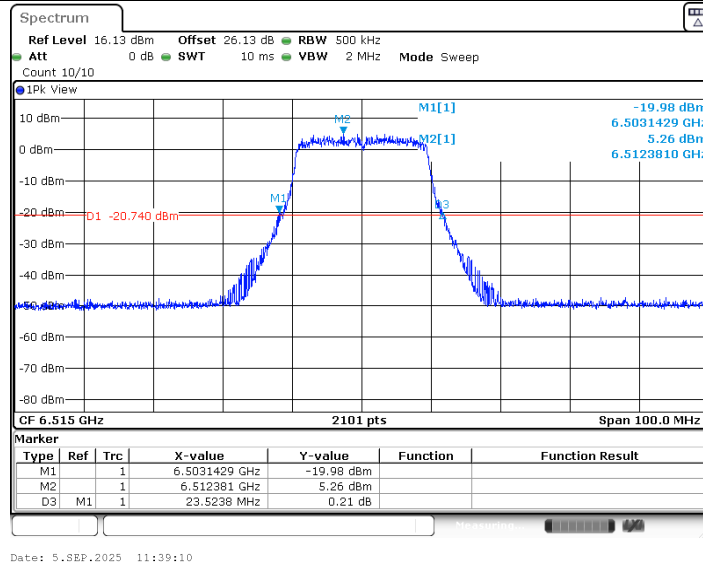




11BE20MIMO_Ant6_6515

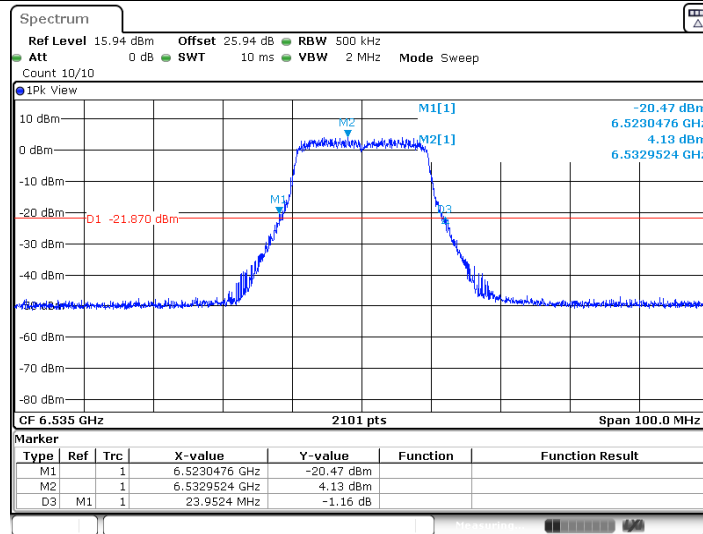


11BE20MIMO_Ant7_6515



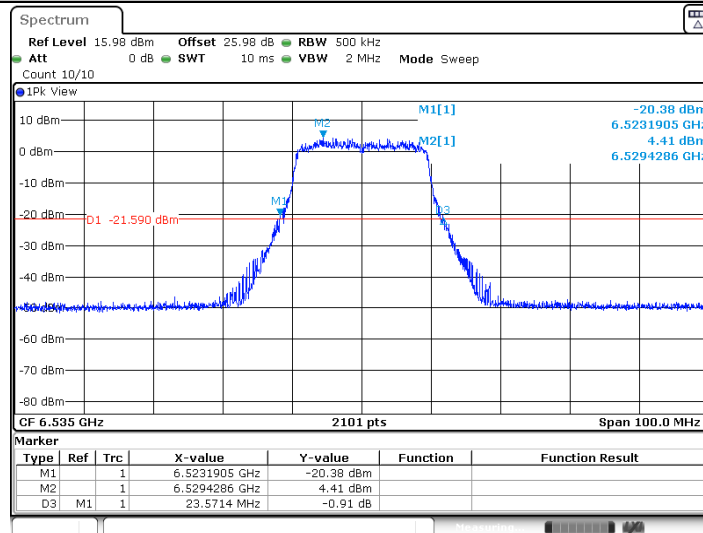


11BE20MIMO_Ant6_6535



Date: 5.SEP.2025 11:40:51

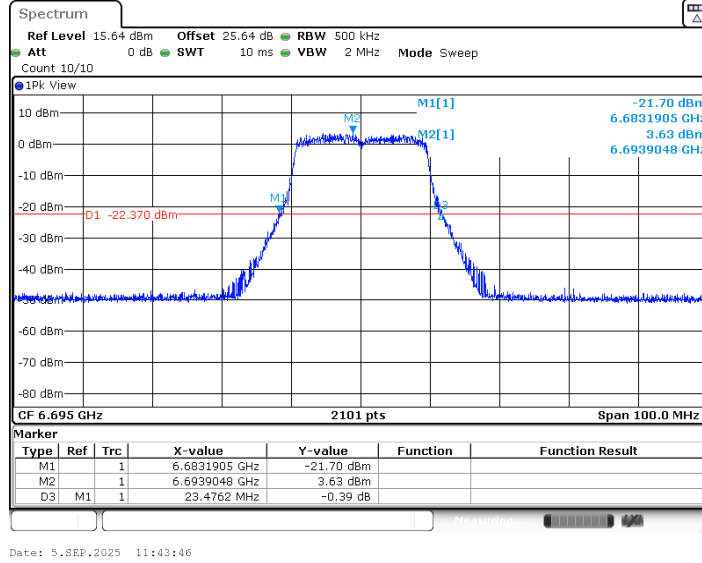
11BE20MIMO_Ant7_6535



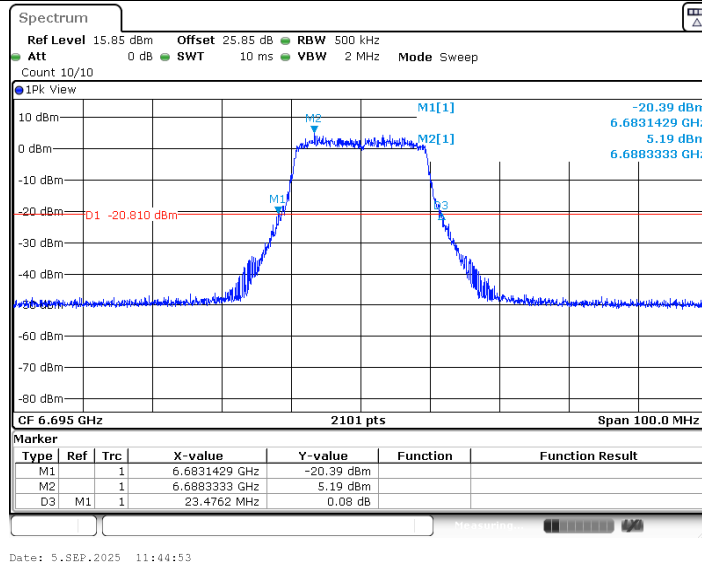
Date: 5.SEP.2025 11:41:59



11BE20MIMO_Ant6_6695

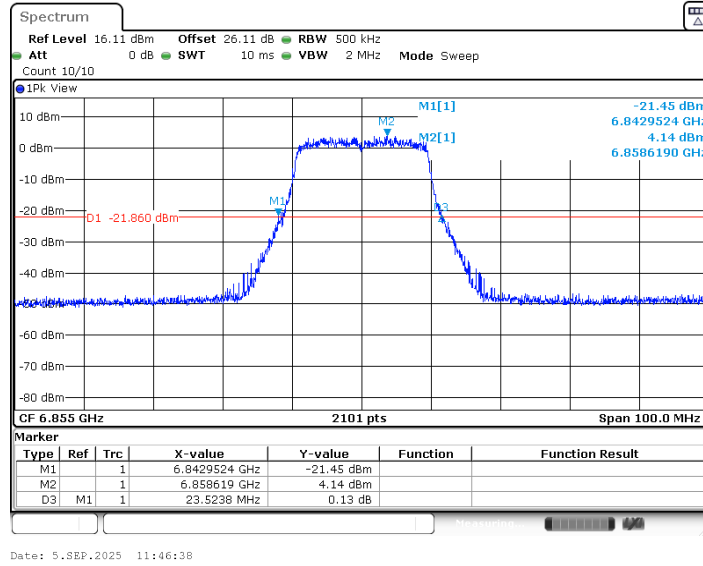


11BE20MIMO_Ant7_6695

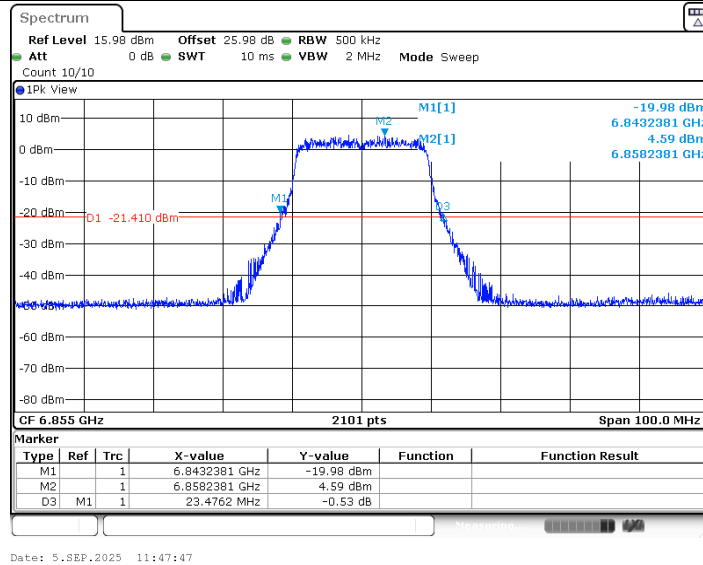


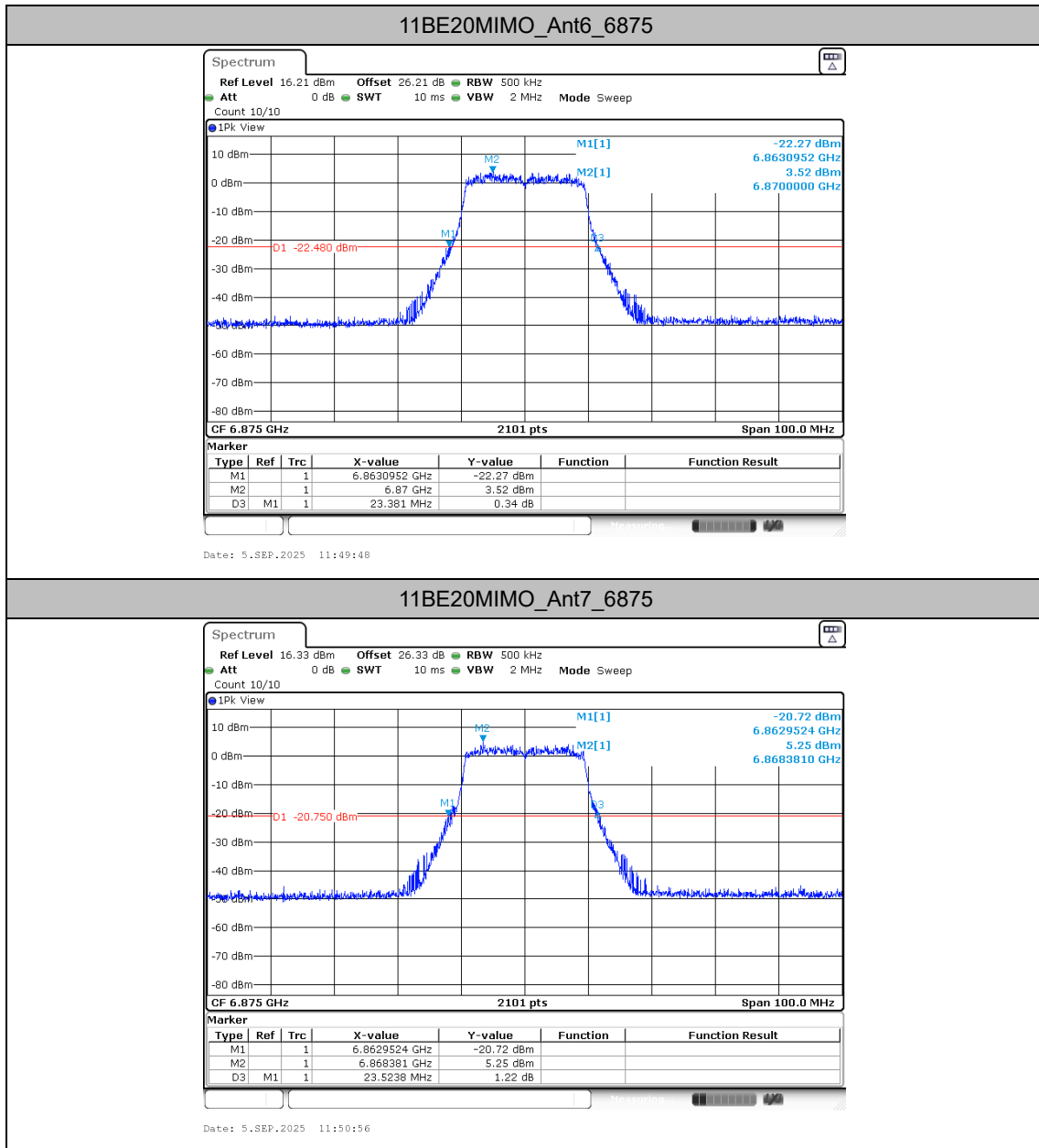


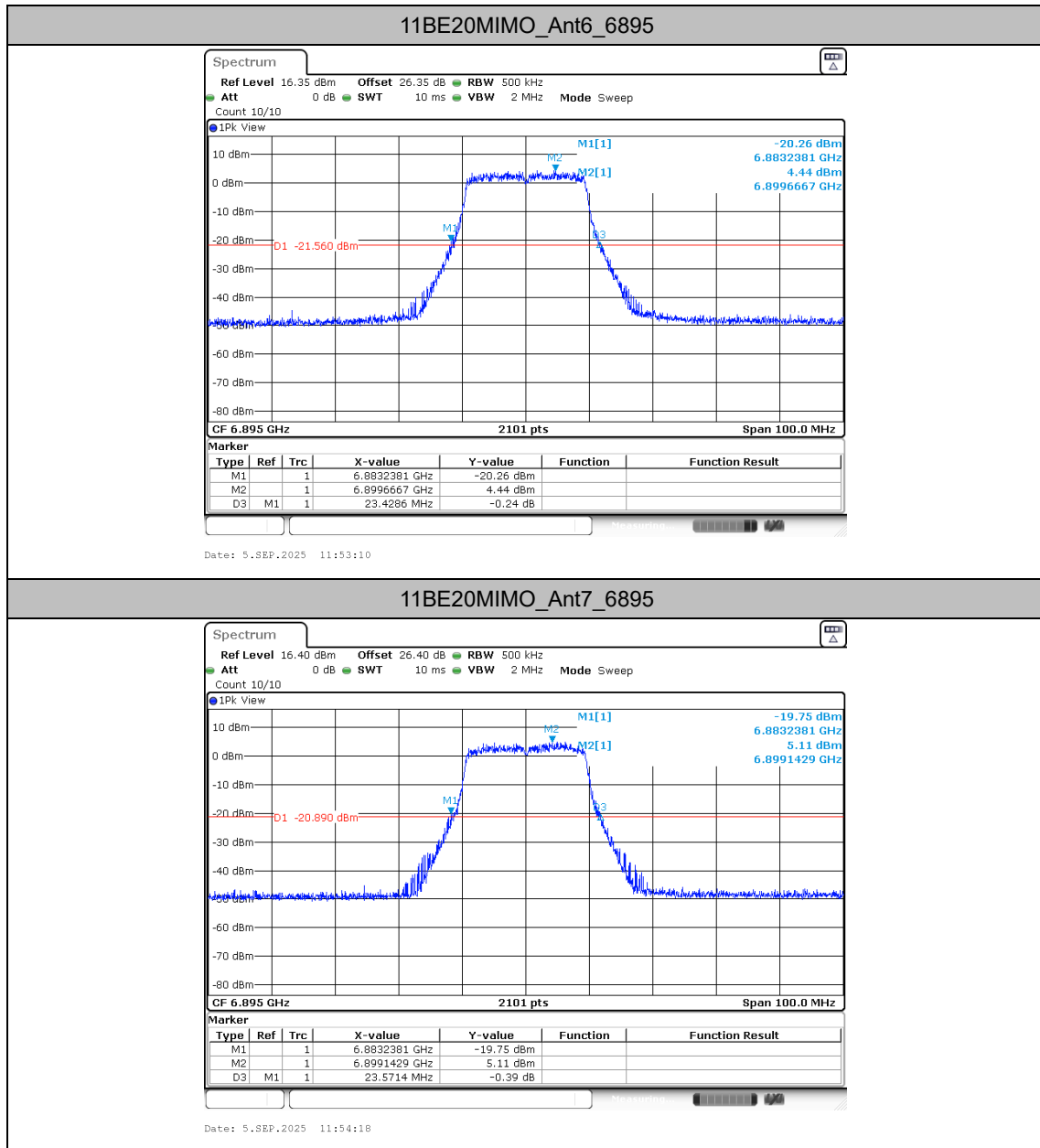
11BE20MIMO_Ant6_6855



11BE20MIMO_Ant7_6855

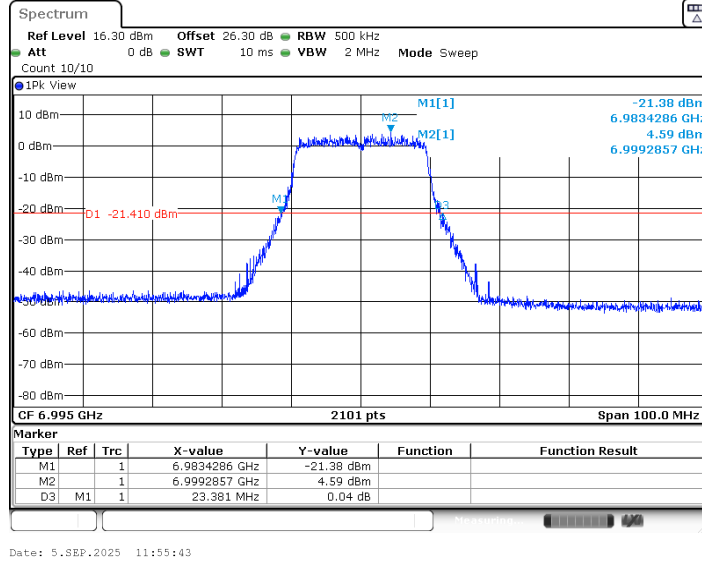




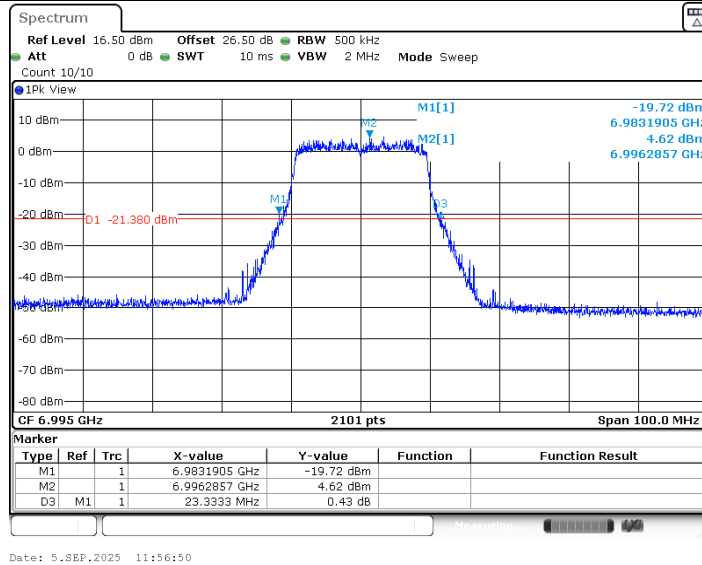




11BE20MIMO_Ant6_6995

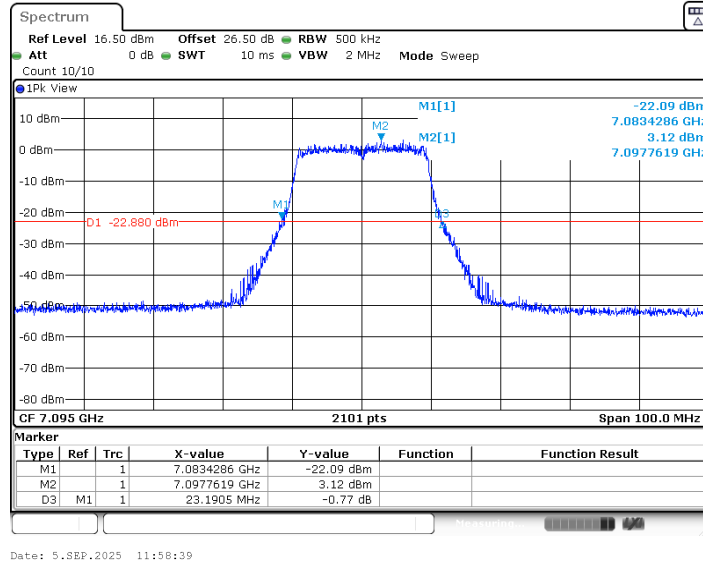


11BE20MIMO_Ant7_6995

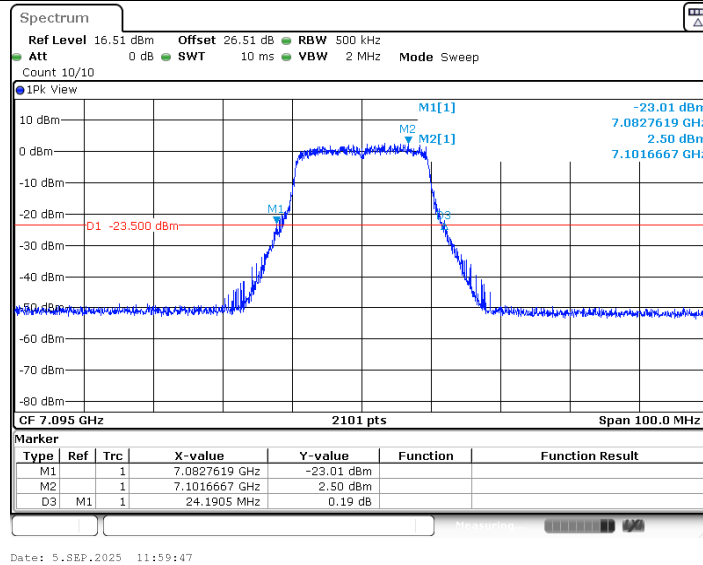


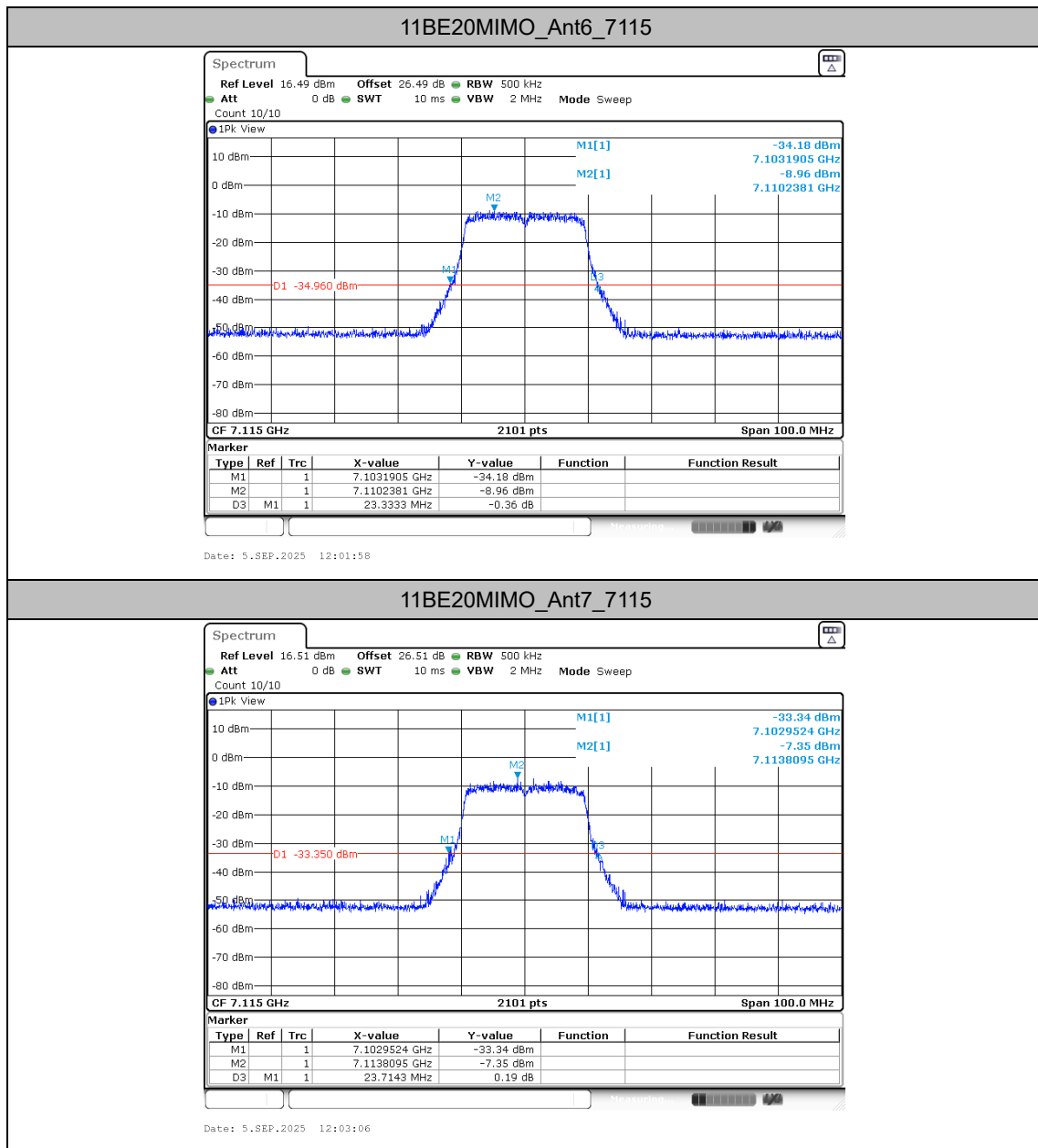


11BE20MIMO_Ant6_7095



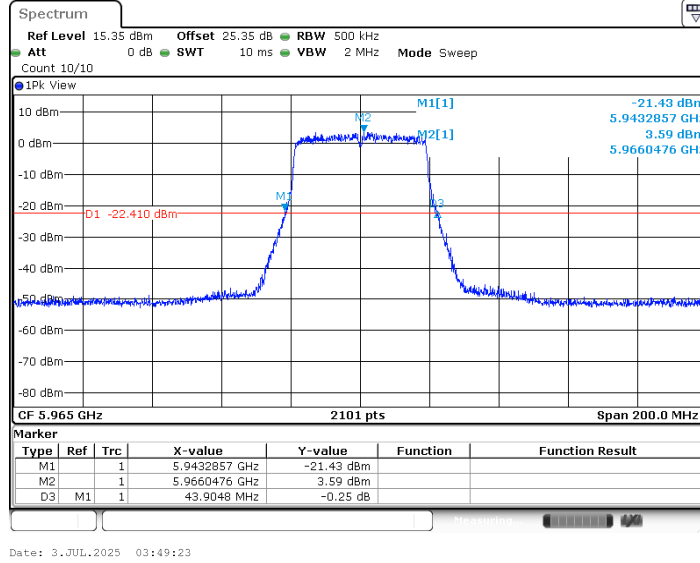
11BE20MIMO_Ant7_7095



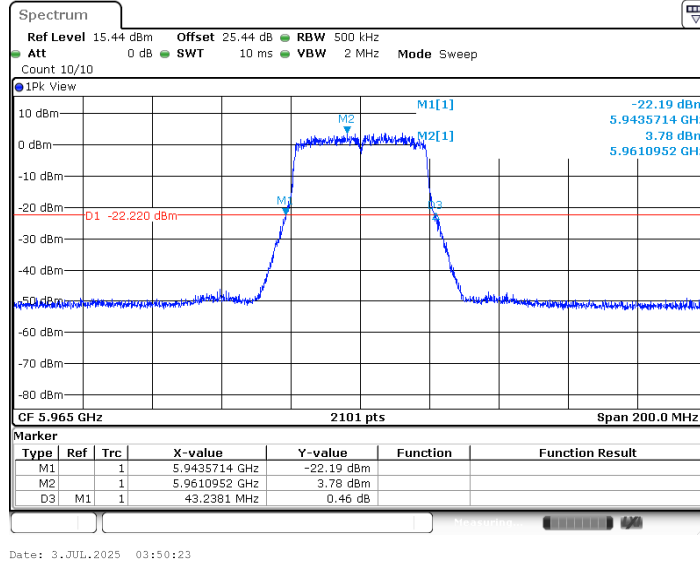




11BE40MIMO_Ant6_5965

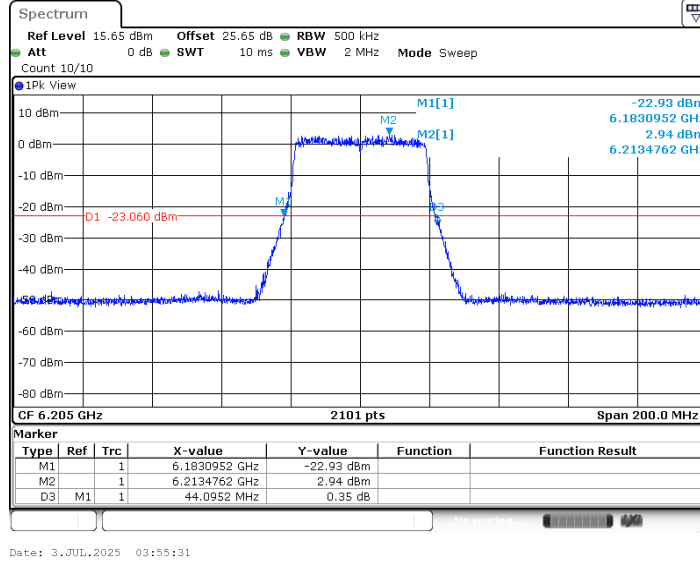


11BE40MIMO_Ant7_5965

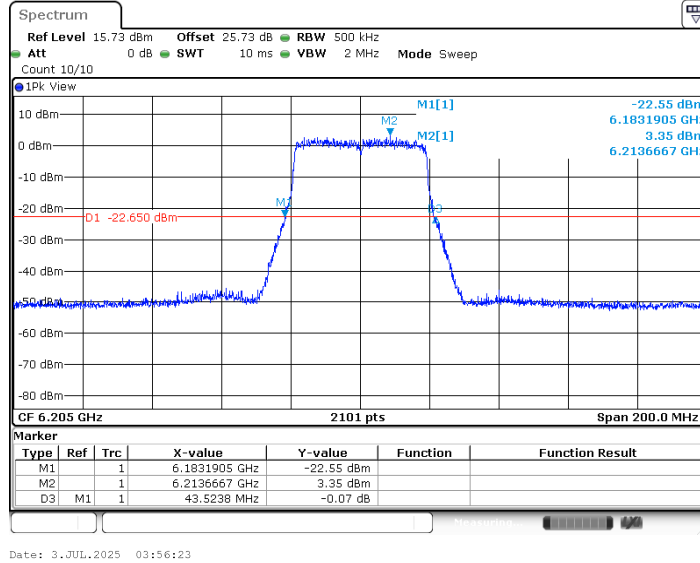




11BE40MIMO_Ant6_6205

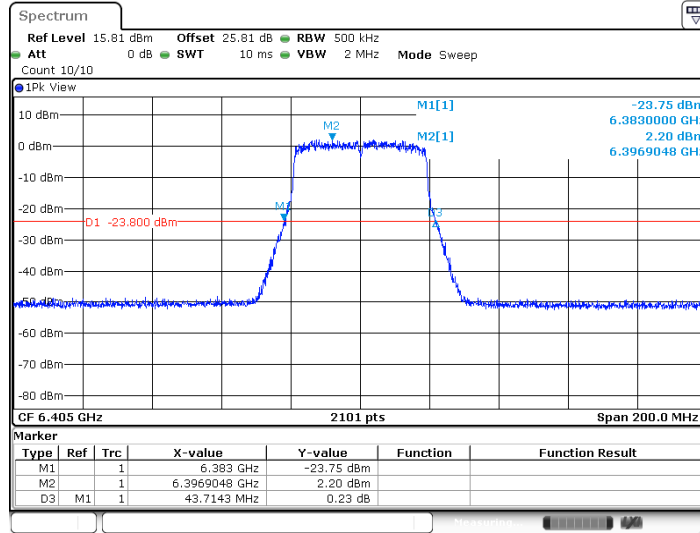


11BE40MIMO_Ant7_6205



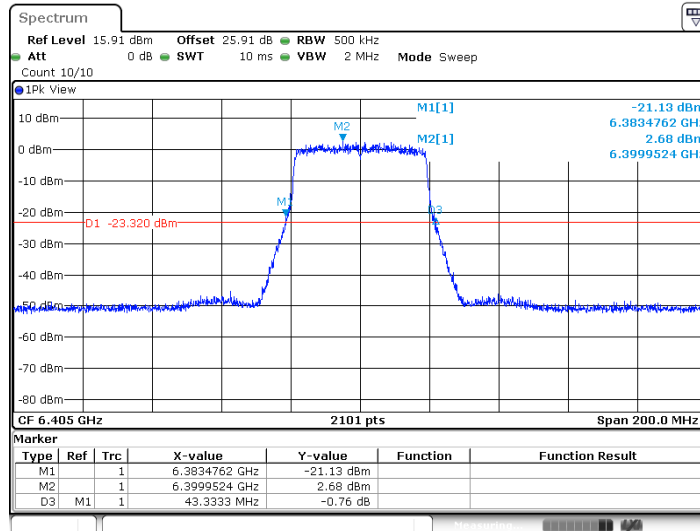


11BE40MIMO_Ant6_6405



Date: 3.JUL.2025 03:58:29

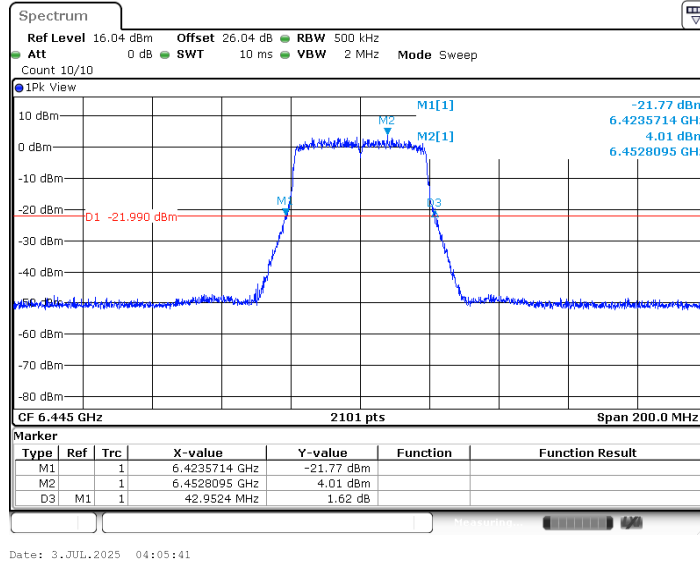
11BE40MIMO_Ant7_6405



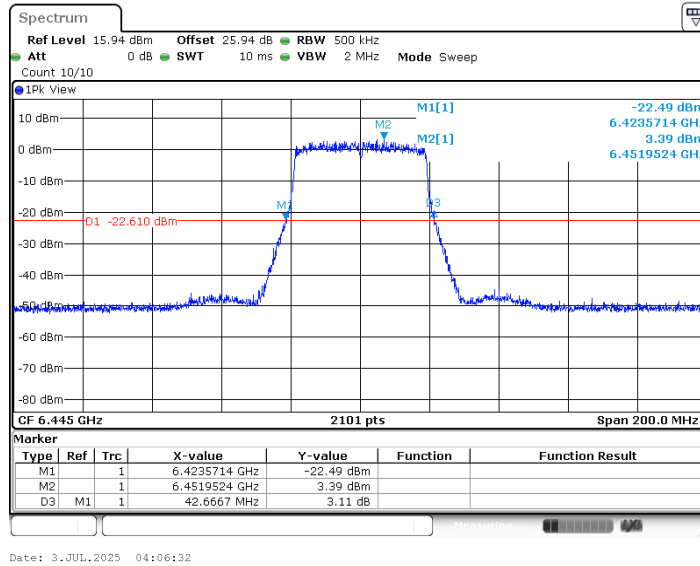
Date: 3.JUL.2025 03:59:20



11BE40MIMO_Ant6_6445

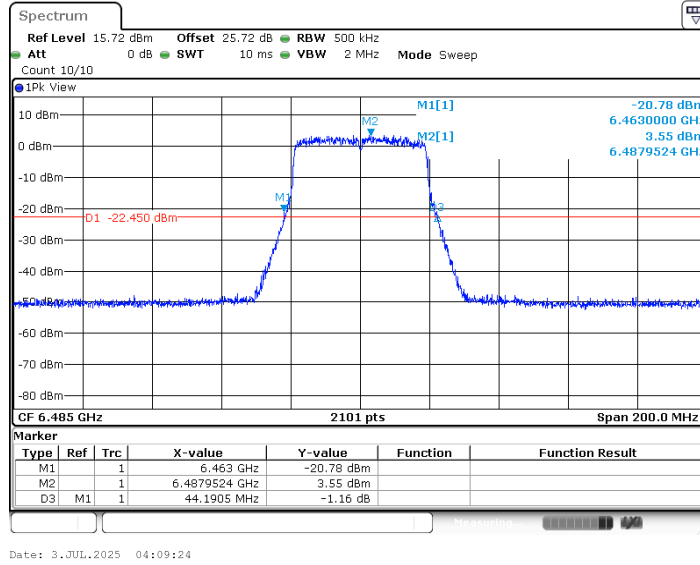


11BE40MIMO_Ant7_6445

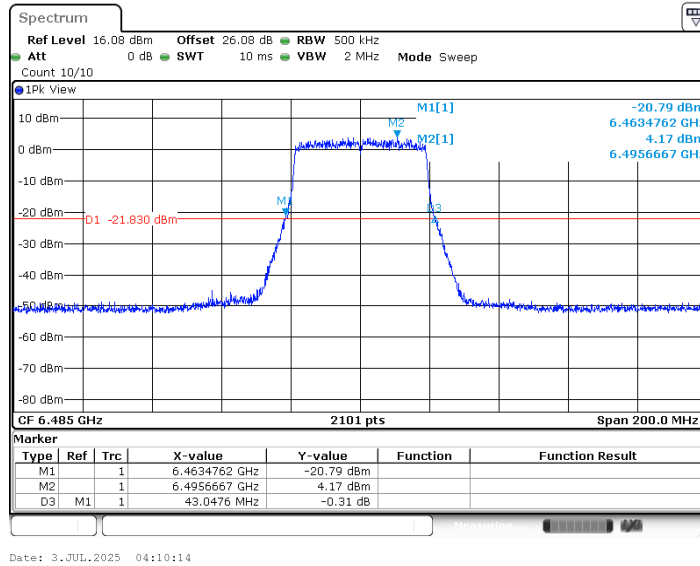




11BE40MIMO_Ant6_6485

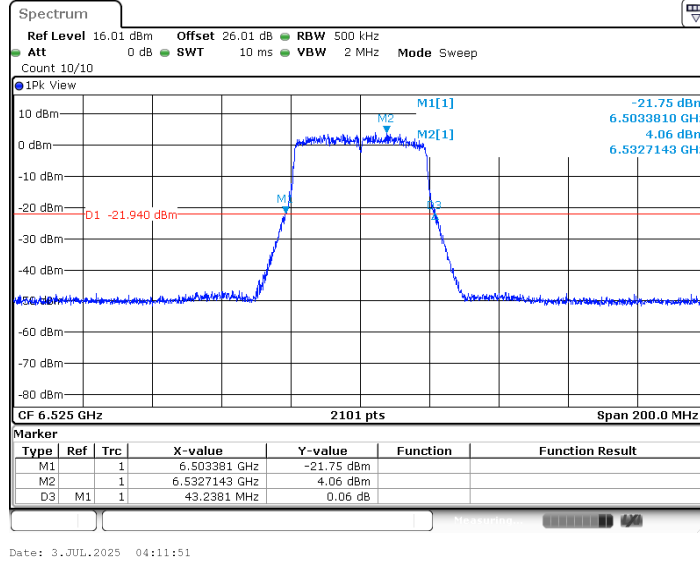


11BE40MIMO_Ant7_6485

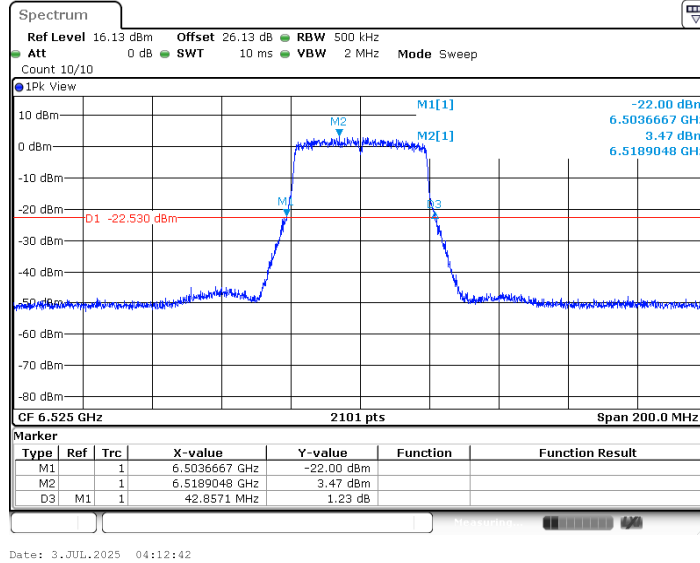




11BE40MIMO_Ant6_6525

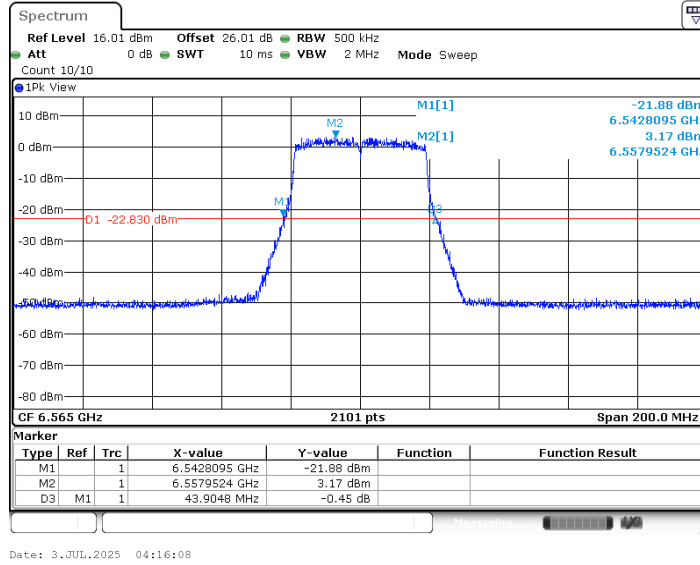


11BE40MIMO_Ant7_6525

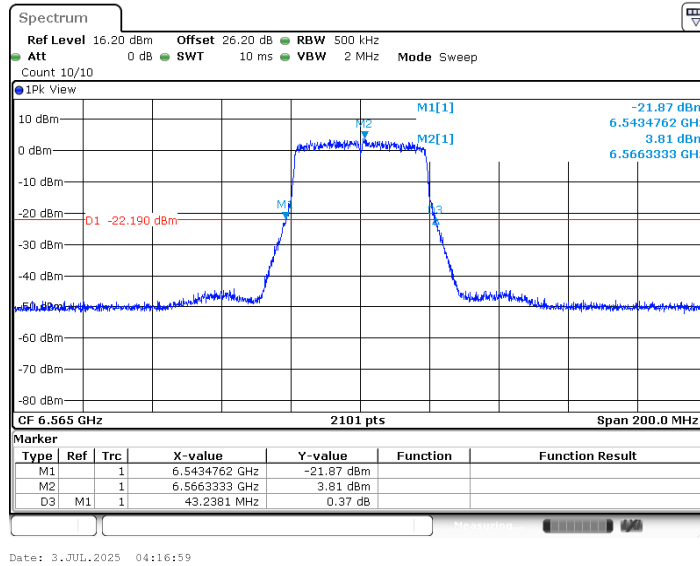




11BE40MIMO_Ant6_6565

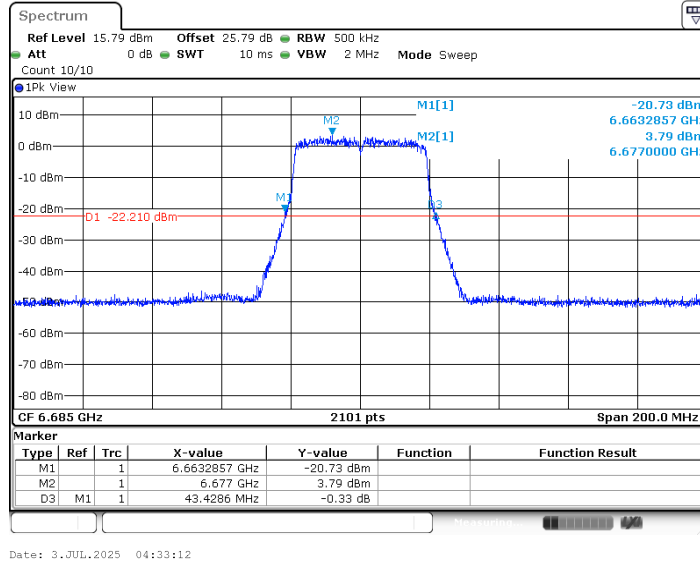


11BE40MIMO_Ant7_6565

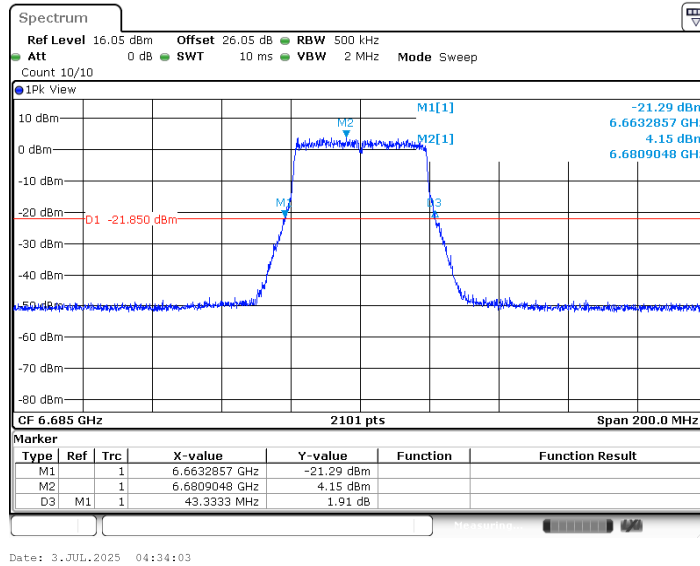




11BE40MIMO_Ant6_6685

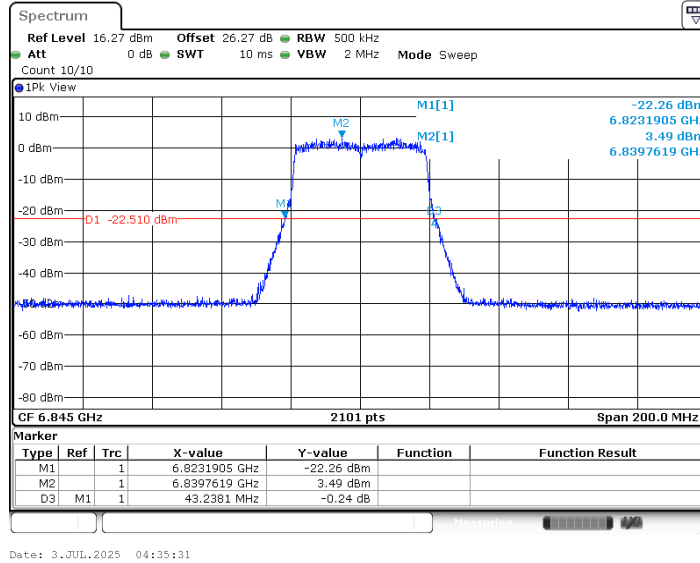


11BE40MIMO_Ant7_6685

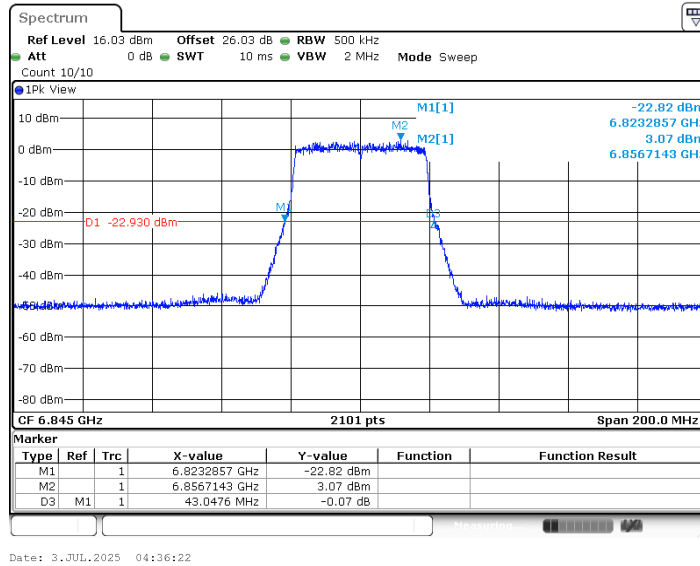




11BE40MIMO_Ant6_6845

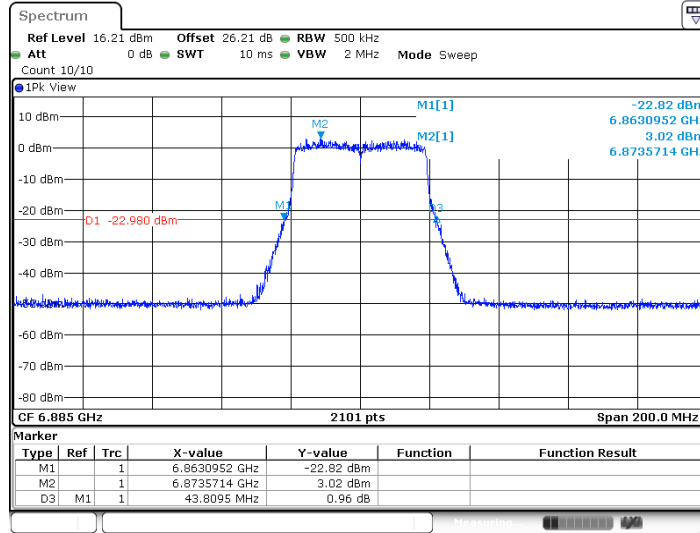


11BE40MIMO_Ant7_6845



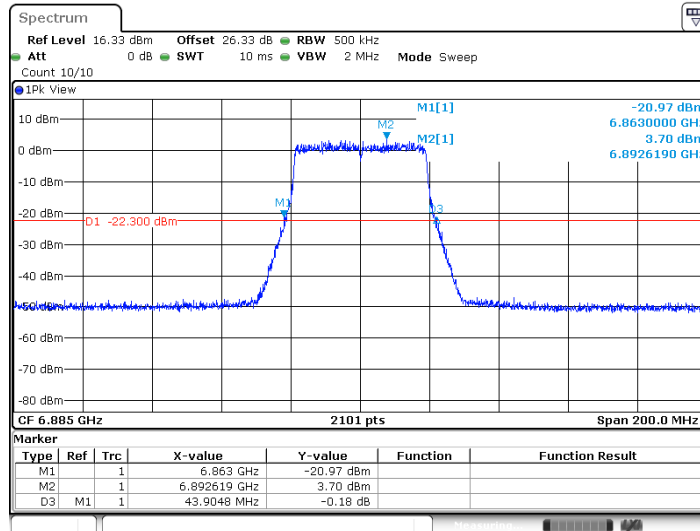


11BE40MIMO_Ant6_6885



Date: 3.JUL.2025 04:50:31

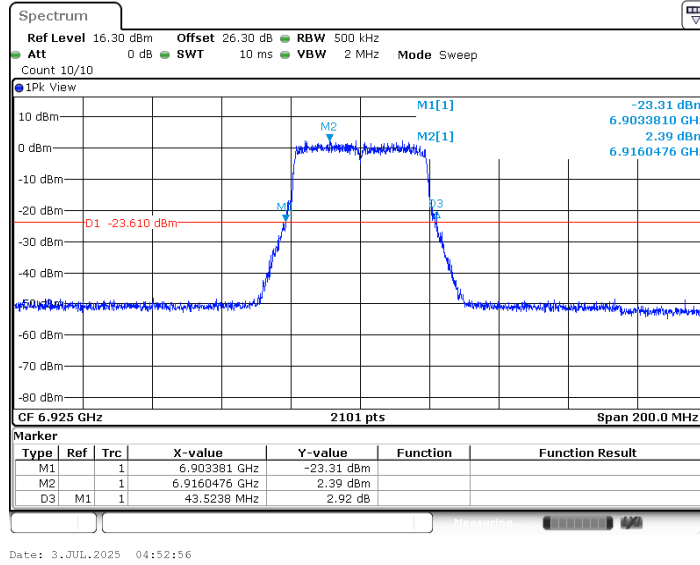
11BE40MIMO_Ant7_6885



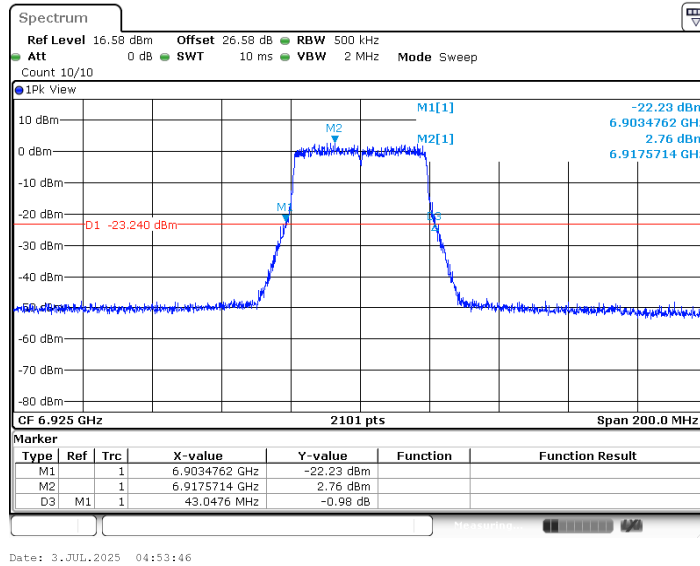
Date: 3.JUL.2025 04:51:22



11BE40MIMO_Ant6_6925

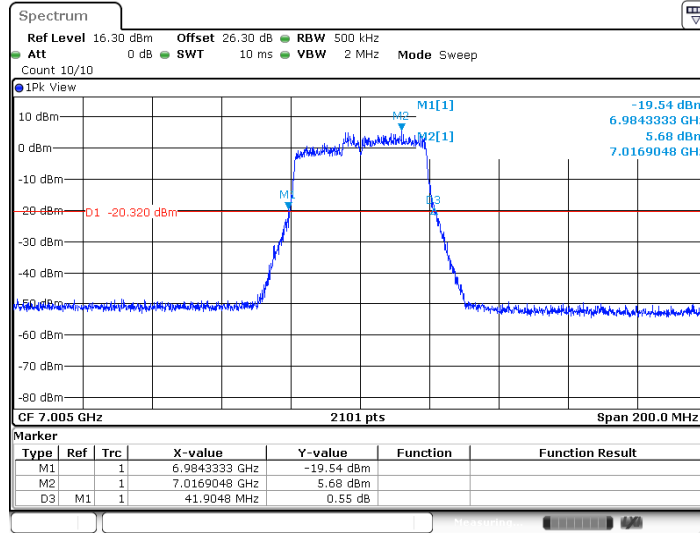


11BE40MIMO_Ant7_6925



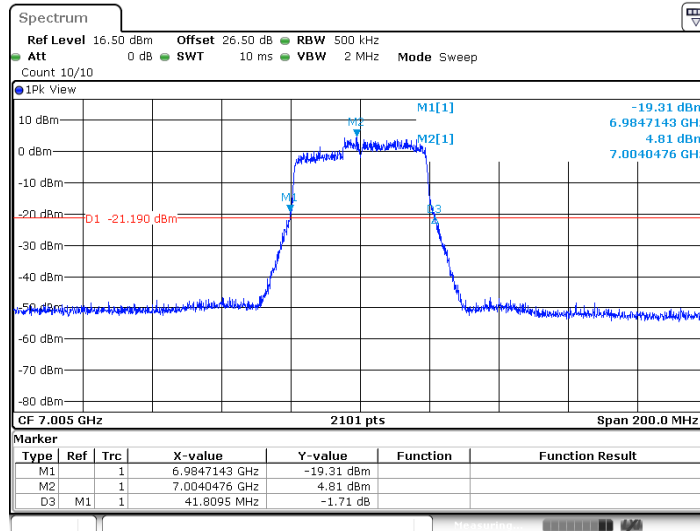


11BE40MIMO_Ant6_7005



Date: 3.JUL.2025 04:56:28

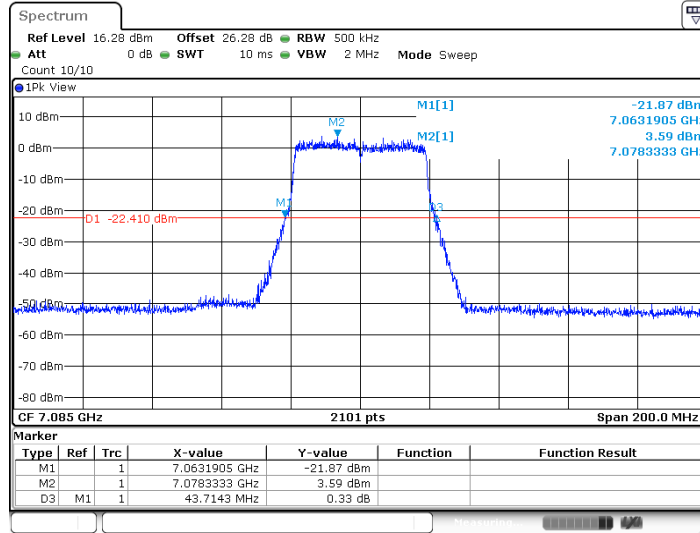
11BE40MIMO_Ant7_7005



Date: 3.JUL.2025 04:57:18

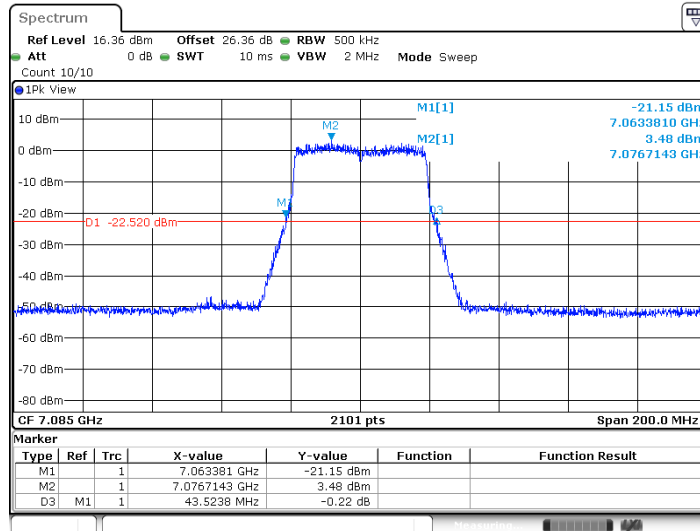


11BE40MIMO_Ant6_7085



Date: 3.JUL.2025 04:59:52

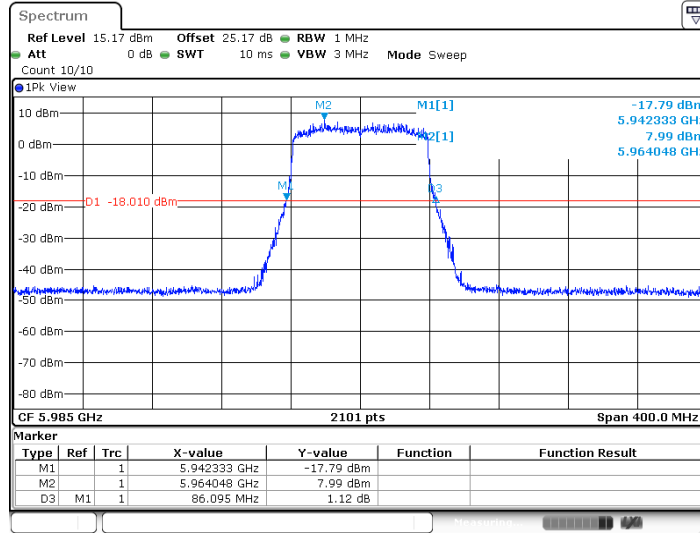
11BE40MIMO_Ant7_7085



Date: 3.JUL.2025 05:00:43

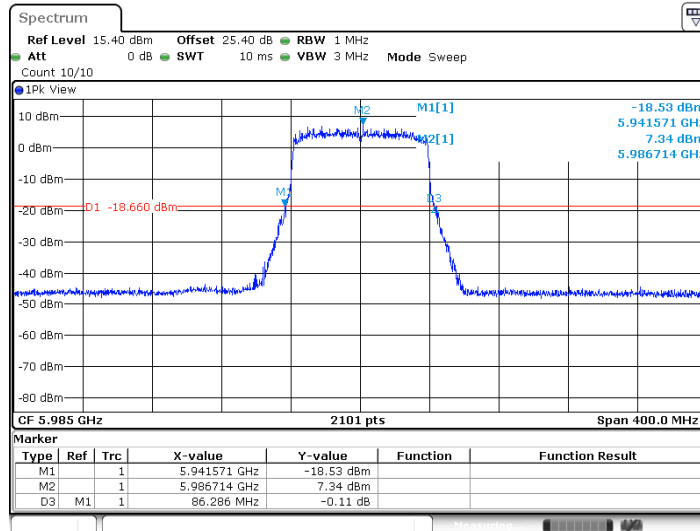


11BE80MIMO_Ant6_5985



Date: 3.JUL.2025 05:07:19

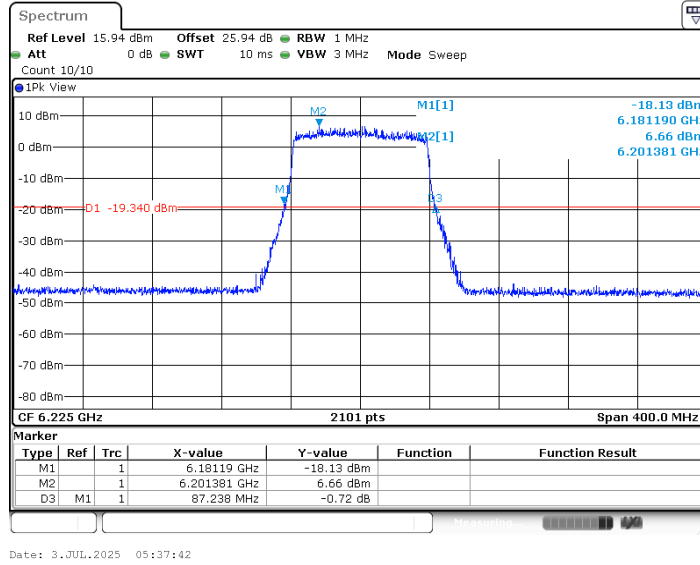
11BE80MIMO_Ant7_5985



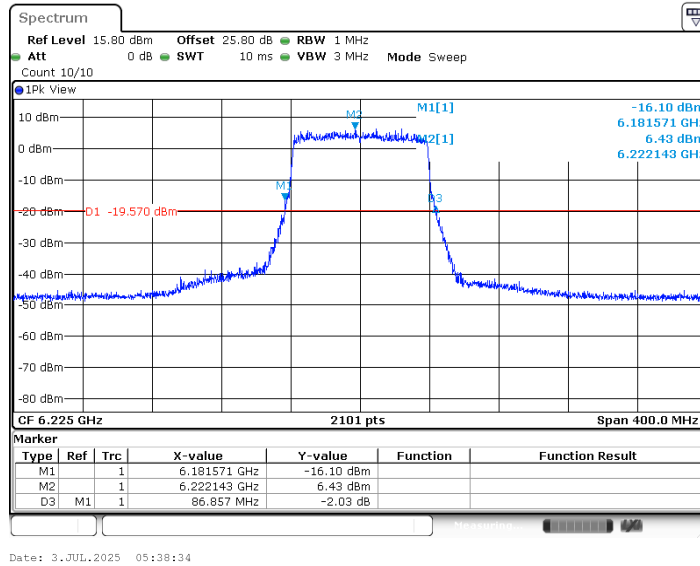
Date: 3.JUL.2025 05:08:17



11BE80MIMO_Ant6_6225

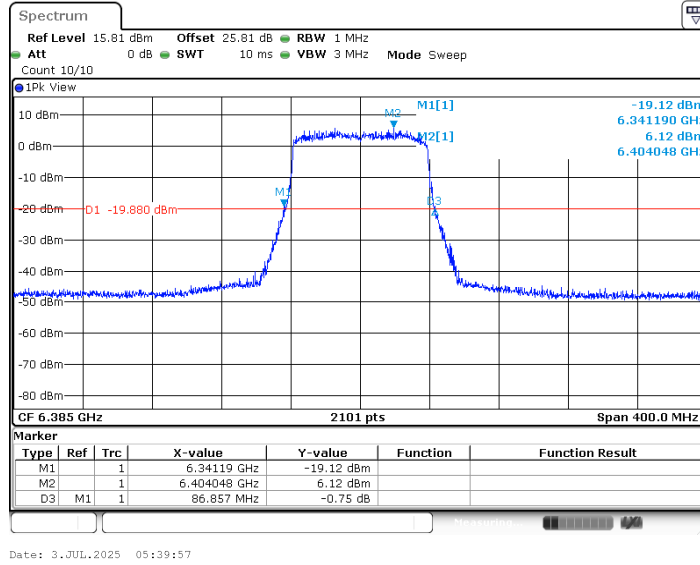


11BE80MIMO_Ant7_6225

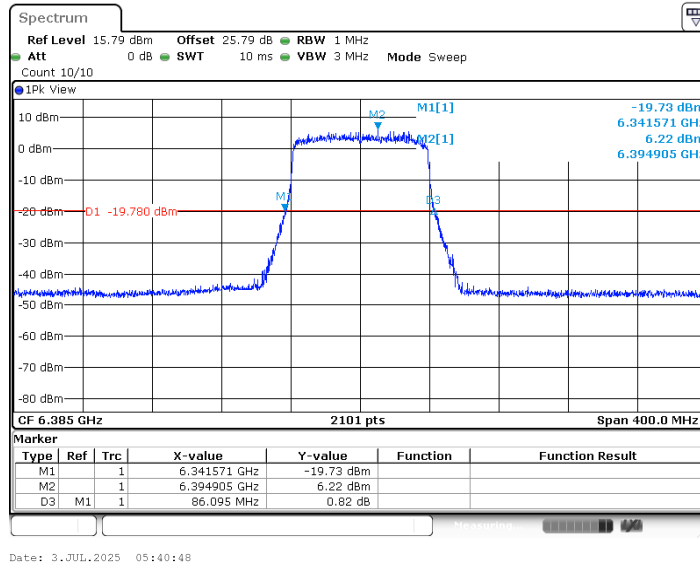




11BE80MIMO_Ant6_6385

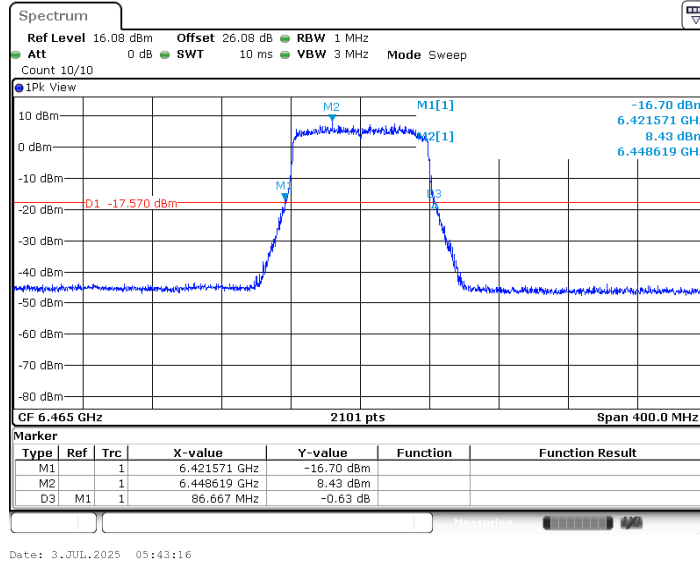


11BE80MIMO_Ant7_6385

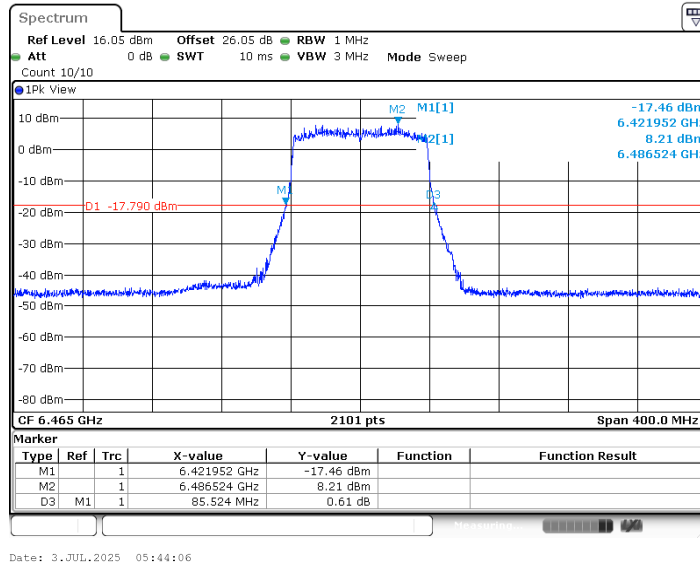




11BE80MIMO_Ant6_6465

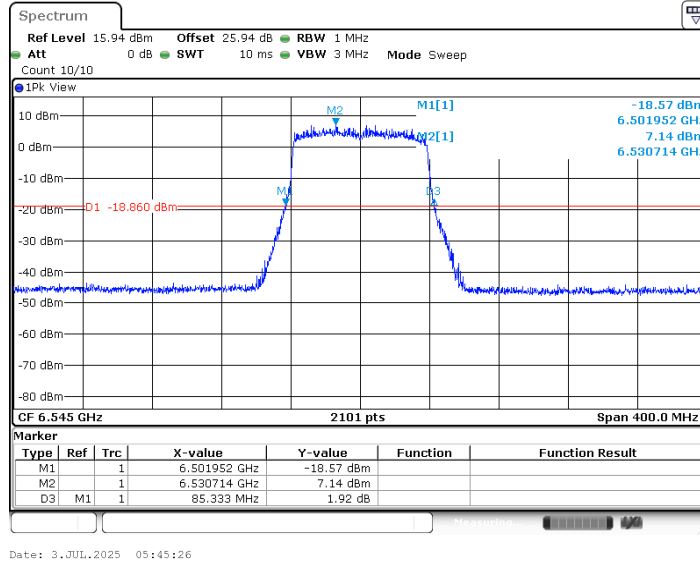


11BE80MIMO_Ant7_6465





11BE80MIMO_Ant6_6545



11BE80MIMO_Ant7_6545

