FCC RF Test Report

APPLICANT	:	Xiaomi Communications Co., Ltd.
EQUIPMENT	:	Mobile Phone
BRAND NAME	:	Xiaomi
MODEL NAME	:	2506BPN68G
FCC ID	:	2AFZZPN68G
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)	:	May 02, 2025 ~ May 26, 2025

We, Sporton International Inc. (Shenzhen), 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. (Shenzhen), the test report shall not be reproduced except in full.

Fly Liang

Approved by: Fly Liang

ACCREDITED
Cert #5145.01

Sporton International Inc. (ShenZhen)

1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055

People's Republic of China

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History of this test report

Report No.	Version	Description	Issued Date
FR542529G	01	Initial issue of report	Jun. 11, 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 4.14 dB at 2483.56 MHz
3.7	15.207	AC Conducted Emission	Pass	Under limit 14.80 dB at 0.570 MHz
3.8	15.203 15.407(a)	Antenna Requirement	Pass	-

Conformity Assessment Condition:

1. 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/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. 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 Applicant

Xiaomi Communications Co., Ltd.
#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085

1.2 Manufacturer

Xiaomi Communications Co., Ltd.
#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Mobile Phone
Brand Name	Xiaomi
Model Name	2506BPN68G
FCC ID	2AFZZPN68G
IMEI Code	Conducted: 864724070091723/864724070091731 Conduction: 864724070065800/864724070065818 Radiation: 864724070091343/864724070091350 CBP: 866493070031877/866493070031869
HW Version	1351P2404
SW Version	Xiaomi HyperOS 2.0
EUT Stage	Identical Prototype

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

1.4 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+17>** **<5925 MHz ~ 7125 MHz >** 802.11ax HE20 : 7.77 dBm / 0.0060 W 802.11ax HE40 : 10.56 dBm / 0.0114 W 802.11ax HE80 : 13.87 dBm / 0.0244 W 802.11ax HE160 : 15.83 dBm / 0.0383 W 802.11be EHT20 : 7.92 dBm / 0.0062 W 802.11be EHT40 : 10.68 dBm / 0.0117 W 802.11be EHT80 : 13.94 dBm / 0.0248 W 802.11be EHT160 : 15.88 dBm / 0.0387 W 802.11be EHT320 : 17.13 dBm / 0.0516 W
99% Occupied Bandwidth	802.11 be EHT20 : 18.838 MHz 802.11 be EHT40 : 37.956 MHz 802.11 be EHT80 : 77.608 MHz 802.11 be EHT160 : 157.52 MHz 802.11 be EHT320 : 318.37 MHz
Antenna Type / Gain	**<5925 MHz ~ 6425 MHz >** <Ant. 6> : PIFA Antenna with gain -0.50 dBi <Ant. 17> : PIFA Antenna with gain -0.50 dBi **<6425 MHz ~ 6525 MHz >** <Ant. 6> : PIFA Antenna with gain -2.30 dBi <Ant. 17> : PIFA Antenna with gain -2.30 dBi **<6525 MHz ~ 6875 MHz >** <Ant. 6> : PIFA Antenna with gain -0.70 dBi <Ant. 17> : PIFA Antenna with gain -0.70 dBi **<6875 MHz ~ 7125 MHz >** <Ant. 6> : PIFA Antenna with gain -2.00 dBi <Ant. 17> : PIFA Antenna with gain -2.00 dBi
Type of Modulation	802.11ax: OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM / 1024QAM) 802.11be: OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM / 1024QAM / 4096QAM)

Remark:

1. WIFI MIMO support CDD mode.
2. For WLAN SISO/MIMO mode, the whole testing has assessed only MIMO mode by referring to their higher conducted power.
3. 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.
4. 802.11ax/be support full RU tone and partial RU tone, both full RU and partial RU-left (for low CH) and partial RU-right (for high CH) are tested for conducted power/PSD/Channel Mask in appendix A, all the other test case were performed with full RU with its maximum power/PSD.

5. CBP test with antenna path of minimum gain (Minimum gain= -2.30 dBi).
6. The channel puncturing mode is for improving network performance and not available for CBP, the CBP will apply channel bandwidth reduction mechanism to protect incumbent operations.
7. The device does not support UNII-5 CH 2 & UNII-8 CH 233 by manufacturer declared.
8. 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.

<Small size RU 52+26 Tone>:

Bandwidth	Tones		Index		For test modes configure
20MHz	26	52	2	37	1
20MHz	52	26	38	4	2
20MHz	52	26	40	6	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

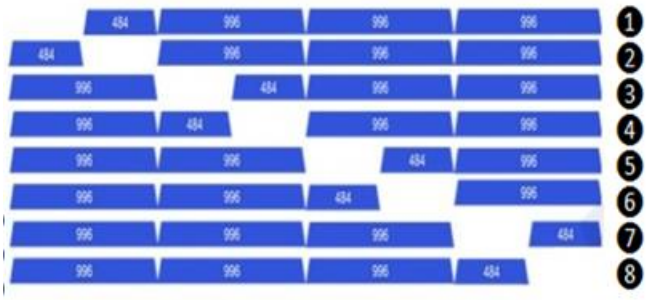
<Large size RU 996+484+242 tone> & <160M BW Puncturing 20MHz>:

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

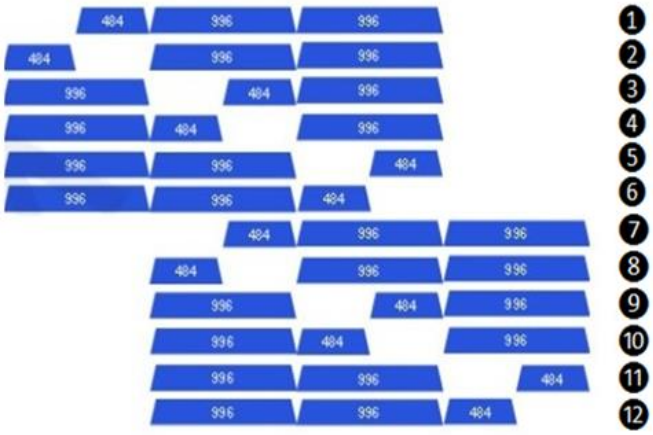
<Large size RU 3*996 tone> & <320M BW Puncturing 80MHz>:

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
			2
			3
			4
			5
			6
			7
			8
			9
			10
			11
			12

Only the worse cases are shown in this report.

9. The worse cases of RSE for partial RU, Large size RU and small size RU are shown in this report.

1.5 Modification of EUT

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

1.6 Testing Location

Sporton International Inc. (ShenZhen) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.01.

Test Firm	Sporton International Inc. (ShenZhen)		
Test Site Location	101, 1st Floor, Block B, Building 1, No. 2, Tengfeng 4th Road, Fenghuang Community, Fuyong Street, Baoan District, Shenzhen City, Guangdong Province 518103 People's Republic of China TEL: +86-755-86066985		
Test Site No.	**Sporton Site No.**	**FCC Designation No.**	**FCC Test Firm Registration No.**
	TH01-SZ; DFS01-SZ; CO02-SZ ; 03CH03-SZ	CN1256	421272

1.7 Test Software

Item	Site	Manufacture	Name	Version
1.	03CH03-SZ	AUDIX	E3	6.2009-8-24
2.	CO02-SZ	AUDIX	E3	6.120613b

1.8 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 C63.10-2013

Remark:

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

2 Test Configuration of Equipment Under Test

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

b. AC power line Conducted Emission was tested under maximum output power.

2.1 Carrier Frequency and Channel

<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 320M	**Channel**	31				63			
	Freq. (MHz)	6105				6265			

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	-
	Freq. (MHz)	7075	7095	-
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
802.11be EHT20	MCS0
802.11be EHT40	MCS0
802.11be EHT80	MCS0
802.11be EHT160	MCS0
802.11be EHT320	MCS0

RSE Co-location mode
WIFI 6G_11be EHT320 CH191 MIMO Tx + WIFI 2.4G_11be EHT20 CH11 SISO Tx + BLE 2Mbps CH38 SISO Tx + LTE Band 48 BW 20M Link

Test Cases	
AC Conducted Emission	Mode 1 : GSM 850 Idle+ BT Link+ WLAN Link(6G)+ USB Cable(Charging From Adapter)
Remark: For Radiated Test Cases, the tests were performed with Adapter and USB Cable	

Ch. #		5925-6425 MHz UNII-5	6425-6525 MHz UNII-6	6525-6875 MHz UNII-7	6875-7125 MHz 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
Straddle		-	-	-	185

Ch. #		5925-6425 MHz UNII-5	6425-6525 MHz UNII-6	6525-6875 MHz UNII-7	6875-7125 MHz 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. #		5925-6425 MHz UNII-5	6425-6525 MHz UNII-6	6525-6875 MHz UNII-7	6875-7125 MHz 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	-

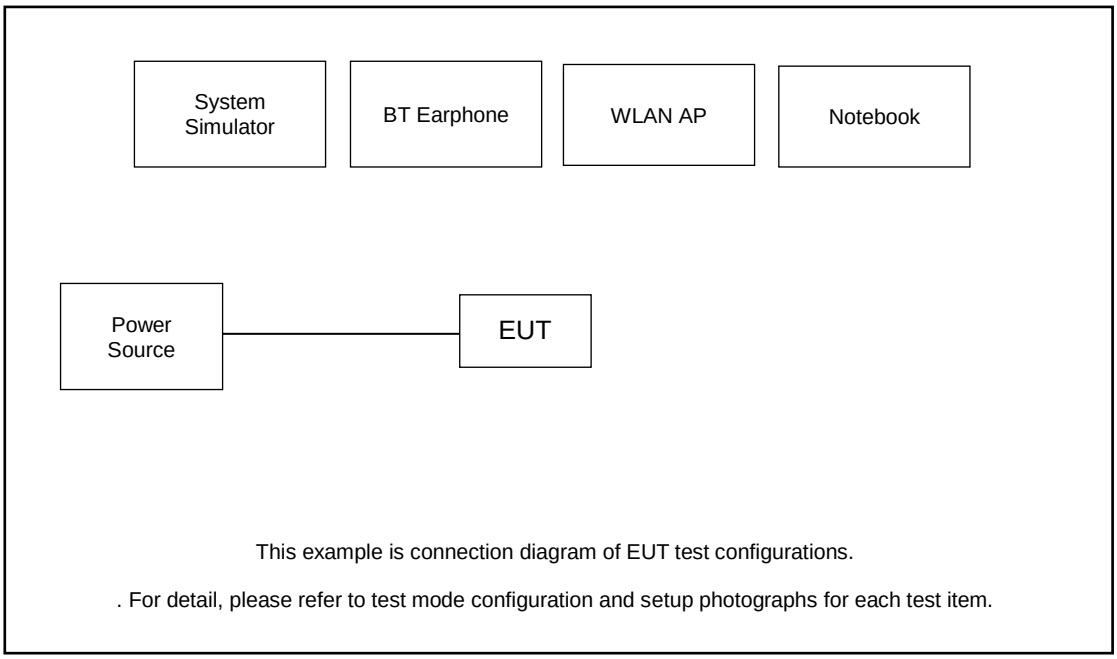
Ch. #		5925-6425 MHz UNII-5	6425-6525 MHz UNII-6	6525-6875 MHz UNII-7	6875-7125 MHz UNII-8
		160M BW	160M BW	160M BW	160M BW
L	Low	015	-	143	207
M	Middle	047			
H	High	079			
Straddle		-	111	175	-

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

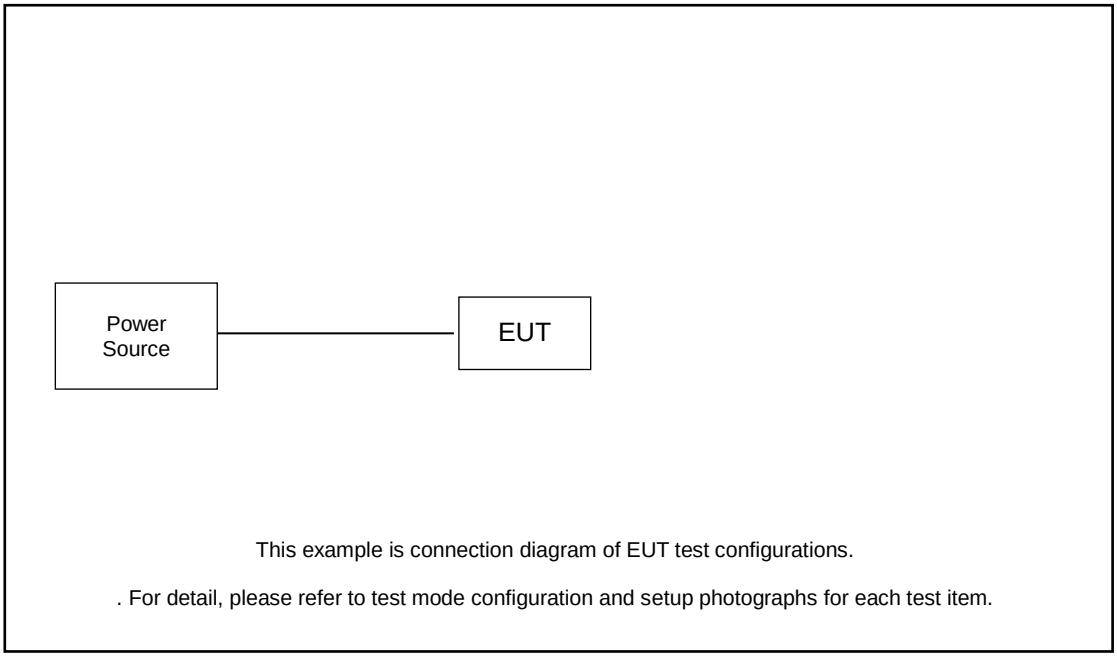
Remark: For radiation spurious emission, the final modulation and the worst data rate was reference the max RF conducted power.

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.	WLAN AP	Dlink	DIR-820L	KA2IR820LA1	N/A	N/A
2.	WLAN AP	NETHEAR	RAXE500	PY320300508	N/A	N/A
3.	Notebook	DELL	Latiude 3400	N/A	N/A	N/A
4.	Bluetooth Earphone	Samsung	EO-MG900	PYAHS-107W	N/A	N/A

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 5.99 dB and 10dB attenuator.

Offset(dB) = RF cable loss(dB) + attenuator factor(dB).

= 5.99 + 10 = 15.99 (dB)

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.

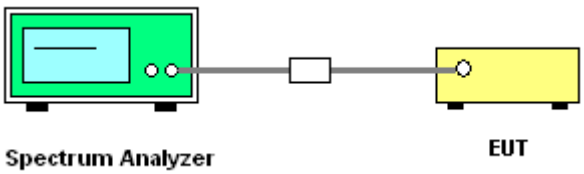
3.1.2 Measuring Instruments

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) ≥ 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.

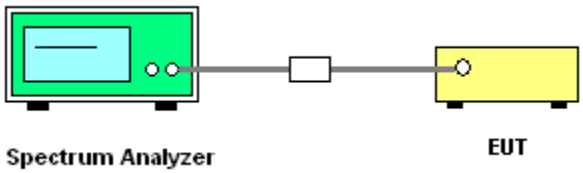
3.2.3 Test Procedures

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																
Mod.	Data Rate	NTX	Freq. (MHz)	RU Config.	Duty Factor (dB)		Conducted Power with duty factor (dBm)			DG (dBi)		EIRP Power (dBm)	EIRP Power Limit (dBm)	Pass /Fail	Power Setting	
					Ant 6	Ant 17	Ant 6	Ant 17	SUM	Ant 6	Ant 17	SUM			Ant 6	Ant 17
HE20	MCS0	2	5955	Full	0.21	0.25	3.02	3.82	6.45	-0.50		5.95	24.00	Pass	2.5	
HE20	MCS0	2	5955	26/0	0.21	0.25	-5.13	-4.77	-1.93	-0.50		-2.43	24.00	Pass	-6	
HE20	MCS0	2	5955	52/37	0.21	0.25	-2.29	-1.74	1.01	-0.50		0.51	24.00	Pass	-3	
HE20	MCS0	2	5955	106/53	0.21	0.25	0.89	1.23	4.08	-0.50		3.58	24.00	Pass	0	
HE20	MCS0	2	6175	Full	0.21	0.25	4.12	4.28	7.21	-0.50		6.71	24.00	Pass	3	
HE20	MCS0	2	6415	Full	0.21	0.25	3.30	3.88	6.61	-0.50		6.11	24.00	Pass	3	
HE40	MCS0	2	5965	Full	0.47	0.39	6.88	7.20	10.05	-0.50		9.55	24.00	Pass	6	
HE40	MCS0	2	6165	Full	0.47	0.39	7.05	7.09	10.08	-0.50		9.58	24.00	Pass	6	
HE40	MCS0	2	6405	Full	0.47	0.39	6.75	7.20	9.99	-0.50		9.49	24.00	Pass	6	
HE80	MCS0	2	5985	Full	0.61	0.61	9.56	9.70	12.64	-0.50		12.14	24.00	Pass	9	
HE80	MCS0	2	6145	Full	0.61	0.61	9.22	9.08	12.16	-0.50		11.66	24.00	Pass	8.5	
HE80	MCS0	2	6385	Full	0.61	0.61	9.56	9.42	12.50	-0.50		12.00	24.00	Pass	9	
HE160	MCS0	2	6025	Full	0.40	0.41	12.96	13.54	16.27	-0.50		15.77	24.00	Pass	12.5	
HE160	MCS0	2	6185	Full	0.40	0.41	12.08	13.19	15.68	-0.50		15.18	24.00	Pass	12	
HE160	MCS0	2	6345	Full	0.40	0.41	11.85	12.90	15.41	-0.50		14.91	24.00	Pass	12	

U-NII-6 MIMO																
Mod.	Data Rate	NTX	Freq. (MHz)	RU Config.	Duty Factor (dB)		Conducted Power with duty factor (dBm)			DG (dBi)		EIRP Power (dBm)	EIRP Power Limit (dBm)	Pass /Fail	Power Setting	
					Ant 6	Ant 17	Ant 6	Ant 17	SUM	Ant 6	Ant 17	SUM			Ant 6	Ant 17
HE20	MCS0	2	6435	Full	0.21	0.25	5.68	6.55	9.15	-2.30		6.85	24.00	Pass	5.5	
HE20	MCS0	2	6435	26/0	0.21	0.25	-2.77	-2.07	0.61	-2.30		-1.69	24.00	Pass	-3	
HE20	MCS0	2	6435	52/37	0.21	0.25	0.40	0.90	3.67	-2.30		1.37	24.00	Pass	0	
HE20	MCS0	2	6435	106/53	0.21	0.25	3.22	4.02	6.65	-2.30		4.35	24.00	Pass	3	
HE20	MCS0	2	6475	Full	0.21	0.25	5.62	6.26	8.96	-2.30		6.66	24.00	Pass	5.5	
HE20	MCS0	2	6515	Full	0.21	0.25	5.67	5.85	8.77	-2.30		6.47	24.00	Pass	5	
HE40	MCS0	2	6445	Full	0.47	0.39	8.25	9.19	11.75	-2.30		9.45	24.00	Pass	8	
HE40	MCS0	2	6485	Full	0.47	0.39	8.24	9.26	11.79	-2.30		9.49	24.00	Pass	8	
HE40	MCS0	2	6525	Full	0.47	0.39	7.14	8.15	10.68	-0.70		9.98	24.00	Pass	6.5	
HE80	MCS0	2	6465	Full	0.61	0.61	11.70	12.33	15.04	-2.30		12.74	24.00	Pass	11	
HE80	MCS0	2	6545	Full	0.61	0.61	10.21	10.33	13.28	-0.70		12.58	24.00	Pass	9	
HE160	MCS0	2	6505	Full	0.40	0.41	12.87	12.86	15.87	-0.70		15.17	24.00	Pass	12	

U-NII-7 MIMO																
Mod.	Data Rate	NTX	Freq. (MHz)	RU Config.	Duty Factor (dB)		Conducted Power with duty factor (dBm)			DG (dBi)		EIRP Power (dBm)	EIRP Power Limit (dBm)	Pass /Fail	Power Setting	
					Ant 6	Ant 17	Ant 6	Ant 17	SUM	Ant 6	Ant 17	SUM			Ant 6	Ant 17
HE20	MCS0	2	6535	Full	0.21	0.25	4.15	4.42	7.30	-0.70		6.60	24.00	Pass	3.5	
HE20	MCS0	2	6535	26/0	0.21	0.25	-4.45	-3.89	-1.15	-0.70		-1.85	24.00	Pass	-5	
HE20	MCS0	2	6535	52/37	0.21	0.25	-1.65	-1.32	1.53	-0.70		0.83	24.00	Pass	-2	
HE20	MCS0	2	6535	106/53	0.21	0.25	1.37	1.89	4.65	-0.70		3.95	24.00	Pass	1	
HE20	MCS0	2	6695	Full	0.21	0.25	4.23	4.41	7.33	-0.70		6.63	24.00	Pass	3.5	
HE20	MCS0	2	6855	Full	0.21	0.25	4.34	4.73	7.55	-0.70		6.85	24.00	Pass	3.5	
HE40	MCS0	2	6565	Full	0.47	0.39	7.04	7.93	10.52	-0.70		9.82	24.00	Pass	6.5	
HE40	MCS0	2	6685	Full	0.47	0.39	7.25	7.75	10.52	-0.70		9.82	24.00	Pass	6.5	
HE40	MCS0	2	6845	Full	0.47	0.39	7.36	8.06	10.73	-0.70		10.03	24.00	Pass	6.5	
HE80	MCS0	2	6625	Full	0.61	0.61	10.42	9.89	13.18	-0.70		12.48	24.00	Pass	9.5	
HE80	MCS0	2	6705	Full	0.61	0.61	10.48	10.97	13.75	-0.70		13.05	24.00	Pass	9.5	
HE80	MCS0	2	6785	Full	0.61	0.61	10.42	10.68	13.57	-0.70		12.87	24.00	Pass	9.5	
HE80	MCS0	2	6865	Full	0.61	0.61	10.83	10.78	13.82	-0.70		13.12	24.00	Pass	9.5	
HE160	MCS0	2	6665	Full	0.40	0.41	12.76	13.64	16.23	-0.70		15.53	24.00	Pass	13	
HE160	MCS0	2	6825	Full	0.40	0.41	13.17	13.85	16.53	-0.70		15.83	24.00	Pass	13	

U-NII-8 MIMO																
Mod.	Data Rate	NTX	Freq. (MHz)	RU Config.	Duty Factor (dB)		Conducted Power with duty factor (dBm)			DG (dBi)		EIRP Power (dBm)	EIRP Power Limit (dBm)	Pass /Fail	Power Setting	
					Ant 6	Ant 17	Ant 6	Ant 17	SUM	Ant 6	Ant 17	SUM			Ant 6	Ant 17
HE20	MCS0	2	6875	Full	0.21	0.25	4.47	4.72	7.61	-0.70		6.91	24.00	Pass	3.5	
HE20	MCS0	2	6895	Full	0.21	0.25	5.68	6.39	9.06	-2.00		7.06	24.00	Pass	5	
HE20	MCS0	2	6995	Full	0.21	0.25	5.81	6.13	8.98	-2.00		6.98	24.00	Pass	5.5	
HE20	MCS0	2	7095	Full	0.21	0.25	6.46	7.04	9.77	-2.00		7.77	24.00	Pass	6.5	
HE20	MCS0	2	7095	26/8	0.21	0.25	-1.56	-1.47	1.50	-2.00		-0.50	24.00	Pass	-2	
HE20	MCS0	2	7095	52/40	0.21	0.25	1.06	1.53	4.31	-2.00		2.31	24.00	Pass	1	
HE20	MCS0	2	7095	106/54	0.21	0.25	4.44	4.66	7.56	-2.00		5.56	24.00	Pass	4	
HE40	MCS0	2	6885	Full	0.47	0.39	7.52	8.13	10.84	-0.70		10.14	24.00	Pass	6.5	
HE40	MCS0	2	6925	Full	0.47	0.39	8.04	9.13	11.63	-2.00		9.63	24.00	Pass	7.5	
HE40	MCS0	2	6965	Full	0.47	0.39	9.23	9.46	12.36	-2.00		10.36	24.00	Pass	8.5	
HE40	MCS0	2	7085	Full	0.47	0.39	9.52	9.58	12.56	-2.00		10.56	24.00	Pass	9	
HE80	MCS0	2	6945	Full	0.61	0.61	11.85	12.06	14.97	-2.00		12.97	24.00	Pass	11	
HE80	MCS0	2	7025	Full	0.61	0.61	12.76	12.96	15.87	-2.00		13.87	24.00	Pass	12	
HE160	MCS0	2	6985	Full	0.40	0.41	14.18	14.02	17.11	-2.00		15.11	24.00	Pass	14	

U-NII-5 MIMO																
Mod.	Data Rate	NTX	Freq. (MHz)	RU Config.	Duty Factor (dB)		Conducted Power with duty factor (dBm)			DG (dBi)		EIRP Power (dBm)	EIRP Power Limit (dBm)	Pass /Fail	Power Setting	
					Ant 6	Ant 17	Ant 6	Ant 17	SUM	Ant 6	Ant 17	SUM			Ant 6	Ant 17
BE20	MCS0	2	5955	Full	0.25	0.21	3.21	3.93	6.59	-0.50		6.09	24.00	Pass	2.5	
BE20	MCS0	2	5955	26/0	0.25	0.21	-4.98	-4.70	-1.83	-0.50		-2.33	24.00	Pass	-6	
BE20	MCS0	2	5955	52/37	0.25	0.21	-2.14	-1.67	1.11	-0.50		0.61	24.00	Pass	-3	
BE20	MCS0	2	5955	106/53	0.25	0.21	1.04	1.30	4.18	-0.50		3.68	24.00	Pass	0	
BE20	MCS0	2	6175	Full	0.25	0.21	4.31	4.39	7.36	-0.50		6.86	24.00	Pass	3	
BE20	MCS0	2	6415	Full	0.25	0.21	3.49	3.99	6.76	-0.50		6.26	24.00	Pass	3	
BE40	MCS0	2	5965	Full	0.38	0.38	6.95	7.35	10.17	-0.50		9.67	24.00	Pass	6	
BE40	MCS0	2	6165	Full	0.38	0.38	7.12	7.24	10.20	-0.50		9.70	24.00	Pass	6	
BE40	MCS0	2	6405	Full	0.38	0.38	6.82	7.35	10.11	-0.50		9.61	24.00	Pass	6	
BE80	MCS0	2	5985	Full	0.69	0.67	9.64	9.76	12.71	-0.50		12.21	24.00	Pass	9	
BE80	MCS0	2	6145	Full	0.69	0.67	9.30	9.14	12.23	-0.50		11.73	24.00	Pass	8.5	
BE80	MCS0	2	6385	Full	0.69	0.67	9.64	9.48	12.57	-0.50		12.07	24.00	Pass	9	
BE160	MCS0	2	6025	Full	0.39	0.39	13.01	13.58	16.32	-0.50		15.82	24.00	Pass	12.5	
BE160	MCS0	2	6185	Full	0.39	0.39	12.11	13.22	15.71	-0.50		15.21	24.00	Pass	12	
BE160	MCS0	2	6345	Full	0.39	0.39	11.90	12.94	15.46	-0.50		14.96	24.00	Pass	12	
BE320	MCS0	2	6105	Full	0.67	0.67	14.54	15.19	17.89	-0.50		17.39	24.00	Pass	14	
BE320	MCS0	2	6265	Full	0.67	0.67	14.39	15.37	17.92	-0.50		17.42	24.00	Pass	14	
BE320	MCS0	2	6425	Full	0.67	0.67	14.19	15.10	17.68	-0.70		16.98	24.00	Pass	14	

U-NII-6 MIMO																
Mod.	Data Rate	NTX	Freq. (MHz)	RU Config.	Duty Factor (dB)		Conducted Power with duty factor (dBm)			DG (dBi)		EIRP Power (dBm)	EIRP Power Limit (dBm)	Pass /Fail	Power Setting	
					Ant 6	Ant 17	Ant 6	Ant 17	SUM	Ant 6	Ant 17	SUM			Ant 6	Ant 17
BE20	MCS0	2	6435	Full	0.25	0.21	5.87	6.66	9.29	-2.30		6.99	24.00	Pass	5.5	
BE20	MCS0	2	6435	26/0	0.25	0.21	-2.62	-2.00	0.71	-2.30		-1.59	24.00	Pass	-3	
BE20	MCS0	2	6435	52/37	0.25	0.21	0.55	0.97	3.77	-2.30		1.47	24.00	Pass	0	
BE20	MCS0	2	6435	106/53	0.25	0.21	3.37	4.09	6.75	-2.30		4.45	24.00	Pass	3	
BE20	MCS0	2	6475	Full	0.25	0.21	5.81	6.37	9.11	-2.30		6.81	24.00	Pass	5.5	
BE20	MCS0	2	6515	Full	0.25	0.21	5.86	5.96	8.92	-2.30		6.62	24.00	Pass	5	
BE40	MCS0	2	6445	Full	0.38	0.38	8.32	9.34	11.87	-2.30		9.57	24.00	Pass	8	
BE40	MCS0	2	6485	Full	0.38	0.38	8.31	9.41	11.91	-2.30		9.61	24.00	Pass	8	
BE40	MCS0	2	6525	Full	0.38	0.38	7.21	8.30	10.80	-0.70		10.10	24.00	Pass	6.5	
BE80	MCS0	2	6465	Full	0.69	0.67	11.78	12.39	15.11	-2.30		12.81	24.00	Pass	11	
BE80	MCS0	2	6545	Full	0.69	0.67	10.29	10.39	13.35	-0.70		12.65	24.00	Pass	9	
BE160	MCS0	2	6505	Full	0.39	0.39	12.92	12.90	15.92	-0.70		15.22	24.00	Pass	12	
BE320	MCS0	2	6585	Full	0.67	0.67	14.31	14.66	17.50	-0.70		16.80	24.00	Pass	14	

U-NII-7 MIMO																
Mod.	Data Rate	NTX	Freq. (MHz)	RU Config.	Duty Factor (dB)		Conducted Power with duty factor (dBm)			DG (dBi)		EIRP Power (dBm)	EIRP Power Limit (dBm)	Pass /Fail	Power Setting	
					Ant 6	Ant 17	Ant 6	Ant 17	SUM	Ant 6	Ant 17	SUM			Ant 6	Ant 17
BE20	MCS0	2	6535	Full	0.25	0.21	4.34	4.53	7.44	-0.70		6.74	24.00	Pass	3.5	
BE20	MCS0	2	6535	26/0	0.25	0.21	-4.30	-3.82	-1.05	-0.70		-1.75	24.00	Pass	-5	
BE20	MCS0	2	6535	52/37	0.25	0.21	-1.50	-1.25	1.64	-0.70		0.94	24.00	Pass	-2	
BE20	MCS0	2	6535	106/53	0.25	0.21	1.52	1.96	4.75	-0.70		4.05	24.00	Pass	1	
BE20	MCS0	2	6695	Full	0.25	0.21	4.42	4.52	7.48	-0.70		6.78	24.00	Pass	3.5	
BE20	MCS0	2	6855	Full	0.25	0.21	4.53	4.84	7.70	-0.70		7.00	24.00	Pass	3.5	
BE40	MCS0	2	6565	Full	0.38	0.38	7.11	8.08	10.64	-0.70		9.94	24.00	Pass	6.5	
BE40	MCS0	2	6685	Full	0.38	0.38	7.32	7.90	10.63	-0.70		9.93	24.00	Pass	6.5	
BE40	MCS0	2	6845	Full	0.38	0.38	7.43	8.21	10.85	-0.70		10.15	24.00	Pass	6.5	
BE80	MCS0	2	6625	Full	0.69	0.67	10.50	9.95	13.24	-0.70		12.54	24.00	Pass	9.5	
BE80	MCS0	2	6705	Full	0.69	0.67	10.56	11.03	13.81	-0.70		13.11	24.00	Pass	9.5	
BE80	MCS0	2	6785	Full	0.69	0.67	10.50	10.74	13.63	-0.70		12.93	24.00	Pass	9.5	
BE80	MCS0	2	6865	Full	0.69	0.67	10.91	10.84	13.89	-0.70		13.19	24.00	Pass	9.5	
BE160	MCS0	2	6665	Full	0.39	0.39	12.81	13.68	16.28	-0.70		15.58	24.00	Pass	13	
BE160	MCS0	2	6825	Full	0.39	0.39	13.22	13.89	16.58	-0.70		15.88	24.00	Pass	13	
BE320	MCS0	2	6745	Full	0.67	0.67	14.70	14.93	17.83	-0.70		17.13	24.00	Pass	14	

U-NII-8 MIMO																
Mod.	Data Rate	NTX	Freq. (MHz)	RU Config.	Duty Factor (dB)		Conducted Power with duty factor (dBm)			DG (dBi)		EIRP Power (dBm)	EIRP Power Limit (dBm)	Pass /Fail	Power Setting	
					Ant 6	Ant 17	Ant 6	Ant 17	SUM	Ant 6	Ant 17	SUM			Ant 6	Ant 17
BE20	MCS0	2	6875	Full	0.25	0.21	4.66	4.83	7.75	-0.70		7.05	24.00	Pass	3.5	
BE20	MCS0	2	6895	Full	0.25	0.21	5.87	6.50	9.20	-2.00		7.20	24.00	Pass	5	
BE20	MCS0	2	6995	Full	0.25	0.21	6.00	6.24	9.13	-2.00		7.13	24.00	Pass	5.5	
BE20	MCS0	2	7095	Full	0.25	0.21	6.65	7.15	9.92	-2.00		7.92	24.00	Pass	6.5	
BE20	MCS0	2	7095	26/8	0.25	0.21	-1.41	-1.40	1.60	-2.00		-0.40	24.00	Pass	-2	
BE20	MCS0	2	7095	52/40	0.25	0.21	1.21	1.60	4.42	-2.00		2.42	24.00	Pass	1	
BE20	MCS0	2	7095	106/54	0.25	0.21	4.59	4.73	7.67	-2.00		5.67	24.00	Pass	4	
BE40	MCS0	2	6885	Full	0.38	0.38	7.59	8.28	10.96	-0.70		10.26	24.00	Pass	6.5	
BE40	MCS0	2	6925	Full	0.38	0.38	8.11	9.28	11.75	-2.00		9.75	24.00	Pass	7.5	
BE40	MCS0	2	6965	Full	0.38	0.38	9.30	9.61	12.47	-2.00		10.47	24.00	Pass	8.5	
BE40	MCS0	2	7085	Full	0.38	0.38	9.59	9.73	12.68	-2.00		10.68	24.00	Pass	9	
BE80	MCS0	2	6945	Full	0.69	0.67	11.93	12.12	15.04	-2.00		13.04	24.00	Pass	11	
BE80	MCS0	2	7025	Full	0.69	0.67	12.84	13.02	15.94	-2.00		13.94	24.00	Pass	12	
BE160	MCS0	2	6985	Full	0.39	0.39	14.23	14.06	17.16	-2.00		15.16	24.00	Pass	14	
BE320	MCS0	2	6905	Full	0.67	0.67	14.69	14.14	17.43	-0.70		16.73	24.00	Pass	14	

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).

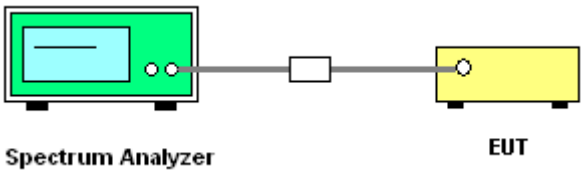
- Measure the duty cycle.
- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 1 MHz.
- Set VBW ≥ 3 MHz.
- Number of points in sweep ≥ 2 Span / RBW.
- Sweep time = auto.
- Detector = RMS
- Trace average at least 100 traces in power averaging mode.
- Add 10 log(1/x), 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.

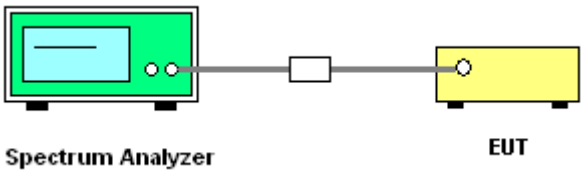
Section J) In-Band Emissions.

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 ≥ 3 X RBW
   d) Number of points in sweep ≥ [2 X span / 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:
$BWEUT$: Transmission bandwidth of EUT signal
$BWInc$: Transmission bandwidth of the simulated incumbent signal (10 MHz wide AWGN signal)
$fc1$: Center frequency of EUT transmission
$fc2$: Center frequency of simulated incumbent signal

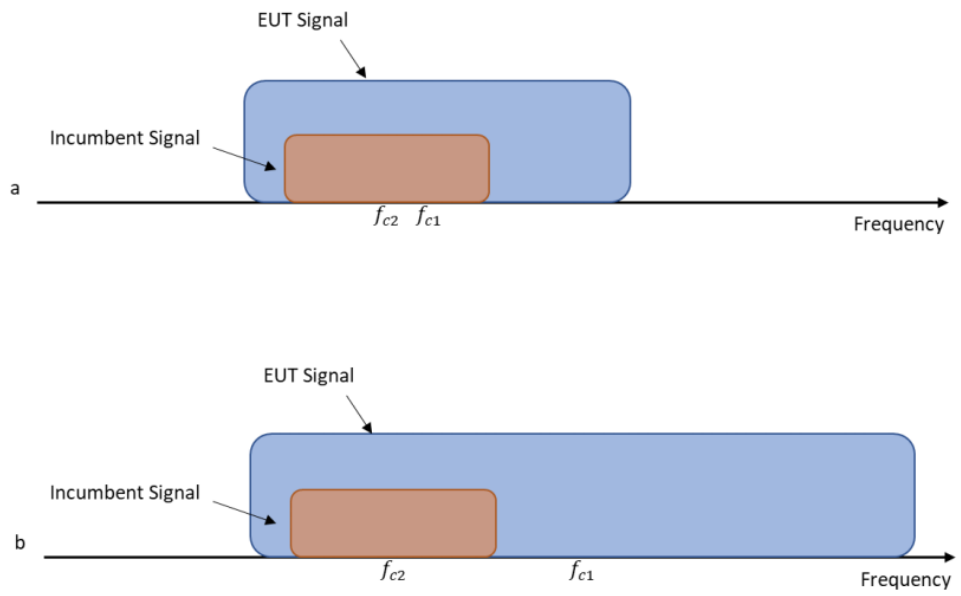


Figure 1. Two possible scenarios where a) center frequency of EUT transmission falls within incumbent's bandwidth, or b) outside of it

3.5.2 Measuring Instruments

See list of measuring equipment of this test report.

3.5.3 Test Procedures

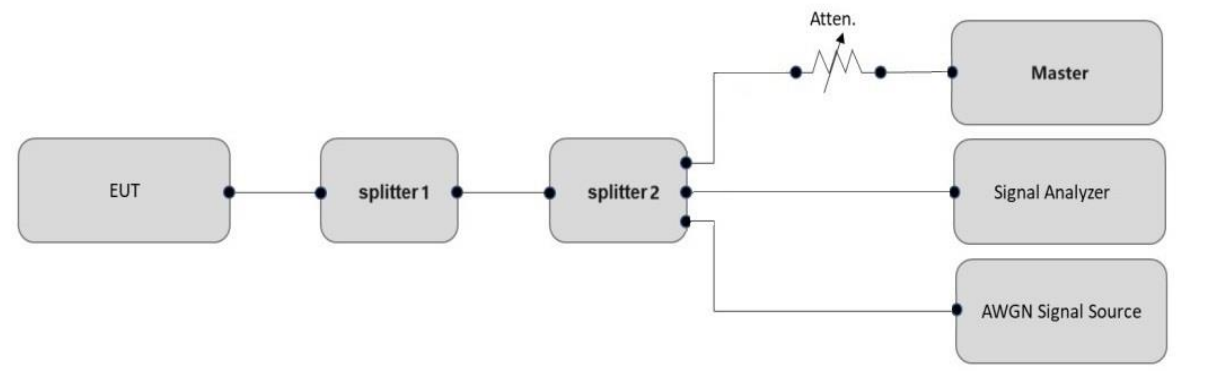
1. To ensure EUT reliably detects an incumbent signal in both scenarios shown in Figure 1, the detection threshold test may be repeated more than once with the incumbent signal (having center frequency $fc2$) tuned to different center frequencies within the UT transmission bandwidth. The criteria specified 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

Conducted 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	GT-AXE11000	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	-69.32	100	-62	-67.02	5.02
					Result: Stop Transmission			
				-70.32	<90	-62	-68.02	6.02
					Result: Minimal Operation			
				-71.32	=0	-62	-69.02	7.02
					Result: Normal Operation			
	6105	320	6110	-71.11	100	-62	-68.81	6.81
					Result: Stop Transmission			
				-72.11	<90	-62	-69.81	7.81
					Result: Minimal Operation			
				-73.11	=0	-62	-70.81	8.81
					Result: Normal Operation			
			6265	-70.12	100	-62	-67.82	5.82
					Result: Stop Transmission			
				-71.12	<90	-62	-68.82	6.82
					Result: Minimal Operation			
				-72.12	=0	-62	-69.82	7.82
					Result: Normal Operation			
			6420	-70.02	100	-62	-67.72	5.72
					Result: Stop Transmission			
				-71.02	<90	-62	-68.72	6.72
					Result: Minimal Operation			
				-72.02	=0	-62	-69.72	7.72
					Result: Normal Operation			

Note 1: Adjusted Power = Injected AWGN Level - minimum antenna gain (Antenna 6, gain = -2.3dBi)

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	-68.11	100	-62	-65.81	3.81
					Result: Stop Transmission			
				-69.11	<90	-62	-66.81	4.81
					Result: Minimal Operation			
				-70.11	=0	-62	-67.81	5.81
					Result: Normal Operation			
UNII Band 5/6/7	6425	320	6270	-70.86	100	-62	-68.56	6.56
					Result: Stop Transmission			
				-71.86	<90	-62	-69.56	7.56
					Result: Minimal Operation			
				-72.86	=0	-62	-70.56	8.56
					Result: Normal Operation			
			6425	**-66.92 (worst)**	100	-62	-64.62	2.62
					Result: Stop Transmission			
				-67.92	<90	-62	-65.62	3.62
					Result: Minimal Operation			
				-68.92	=0	-62	-66.62	4.62
					Result: Normal Operation			
			6580	-71.04	100	-62	-68.74	6.74
					Result: Stop Transmission			
				-72.04	<90	-62	-69.74	7.74
					Result: Minimal Operation			
				-73.04	=0	-62	-70.74	8.74
					Result: Normal Operation			

Note 1: Adjusted Power = Injected AWGN Level - minimum antenna gain (Antenna 6, gain = -2.3dBi)

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	-69.16	100	-62	-66.86	4.86
					Result: Stop Transmission			
				-70.16	<90	-62	-67.86	5.86
					Result: Minimal Operation			
				-71.16	=0	-62	-68.86	6.86
					Result: Normal Operation			
UNII Band 7(8)	6745	320	6590	-71.37	100	-62	-69.07	7.07
					Result: Stop Transmission			
				-72.37	<90	-62	-70.07	8.07
					Result: Minimal Operation			
				-73.37	=0	-62	-71.07	9.07
					Result: Normal Operation			
			6745	-68.57	100	-62	-66.27	4.27
					Result: Stop Transmission			
				-69.57	<90	-62	-67.27	5.27
					Result: Minimal Operation			
				-70.57	=0	-62	-68.27	6.27
					Result: Normal Operation			
			6900	-70.30	100	-62	-68.00	6.00
					Result: Stop Transmission			
				-71.30	<90	-62	-69.00	7.00
					Result: Minimal Operation			
				-72.30	=0	-62	-70.00	8.00
					Result: Normal Operation			

Note 1: Adjusted Power = Injected AWGN Level - minimum antenna gain (Antenna 6, gain = -2.3dBi)

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

Note 3: Margin = Regulated Threshold level - Adjusted Power

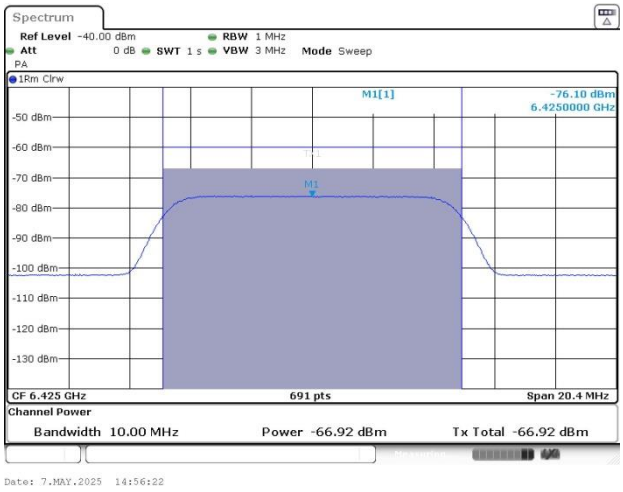
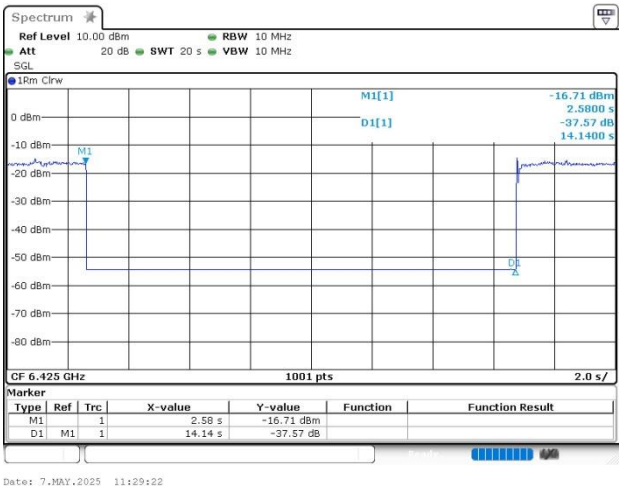
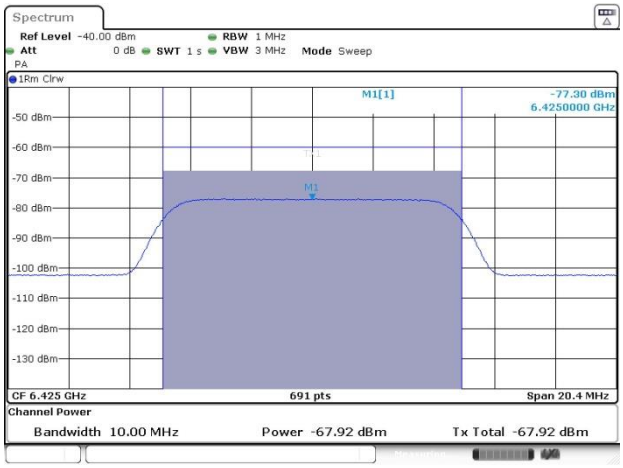
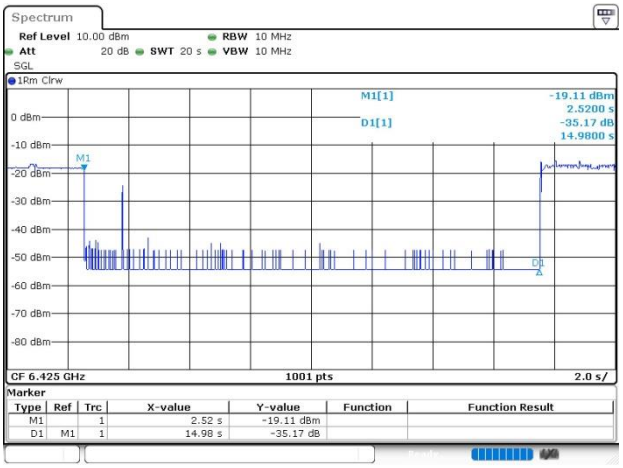
Band	Channel Freq. (MHz)	Channel BW (MHz)	Incumbent freq. (MHz)	Injected AWGN Level (dBm)	Detection Rate (%)	Regulated Threshold level (dBm)	Adjusted Power (dBm)	Margin (dB)
UNII Band 8	7015	20	7015	-71.10	100	-62	-68.80	6.80
					Result: Stop Transmission			
				-72.10	<90	-62	-69.80	7.80
					Result: Minimal Operation			
				-73.10	=0	-62	-70.80	8.80
					Result: Normal Operation			
	6905	320	6750	-71.44	100.00	-62.00	-69.14	7.14
					Result: Stop Transmission			
				-72.44	<90	-62.00	-70.14	8.14
					Result: Minimal Operation			
				-73.44	=0	-62.00	-71.14	9.14
					Result: Normal Operation			
			6905	-68.16	100.00	-62.00	-65.86	3.86
					Result: Stop Transmission			
				-69.16	<90	-62.00	-66.86	4.86
					Result: Minimal Operation			
				-70.16	=0	-62.00	-67.86	5.86
					Result: Normal Operation			
			7060	-71.08	100.00	-62.00	-68.78	6.78
					Result: Stop Transmission			
				-72.08	<90	-62.00	-69.78	7.78
					Result: Minimal Operation			
				-73.08	=0	-62.00	-70.78	8.78
					Result: Normal Operation			

Note 1: Adjusted Power = Injected AWGN Level - minimum antenna gain (Antenna 6, gain = -2.3dBi)

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 6 (AWGN Interference)	
802.11be (BE320) / 6425MHz (Middle) Threshold Level (TL) = -66.92 dBm	802.11be (BE320) / CH95 (Middle) Test result is pass due to no transmission occur.
	
802.11be (BE320) / 6425MHz (Middle) Threshold Level (TL) = -67.92 dBm	802.11be (BE320) / CH95 (Middle) Transmit when the interferer is 1dB lower.
	

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

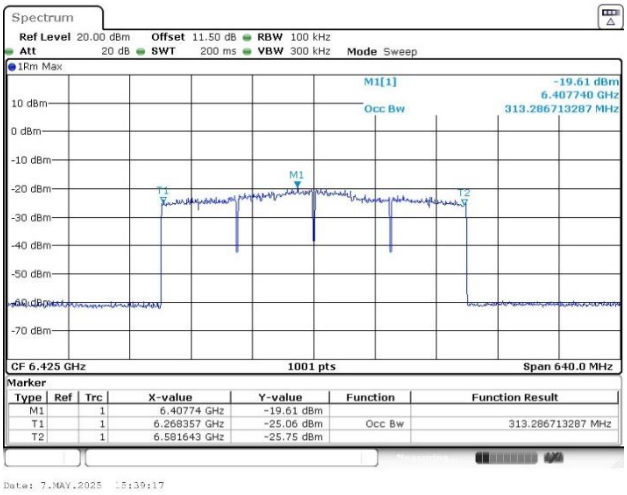
3.5.8 Worst Case of Contention Based Protocol Transmission Bandwidth

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

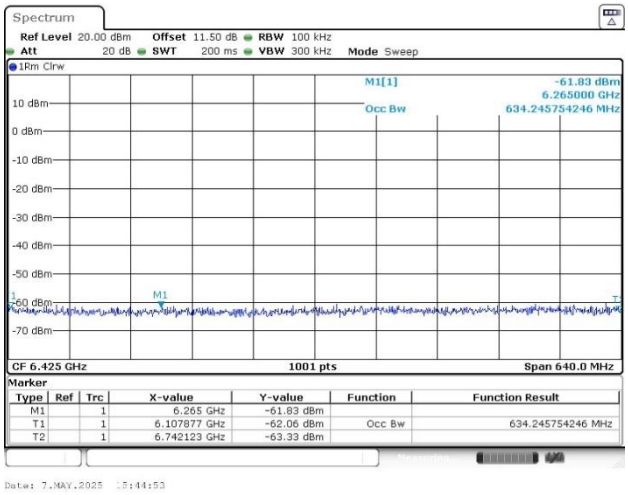
1. When Incumbent Signal inject at lowest frequency, the whole 320MHz bandwidth stop transmission;
2. When Incumbent Signal inject at middle frequency, the whole 320MHz bandwidth stop transmission;
3. When Incumbent Signal inject at highest frequency, the whole 320MHz bandwidth stop transmission;
4. The channel puncturing mode is only for improving network performance and not available for CBP, the CBP apply channel bandwidth reduction mechanism to protect incumbent operations.

UNII 5/6_CH95 (6425MHz / BW=320MHz)

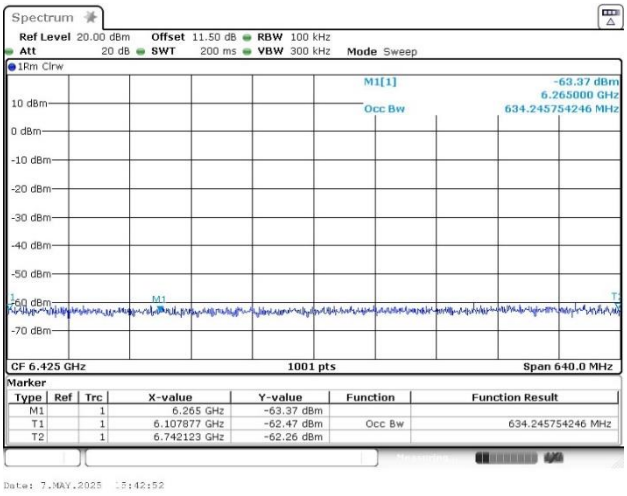
Non-Incumbent Signal



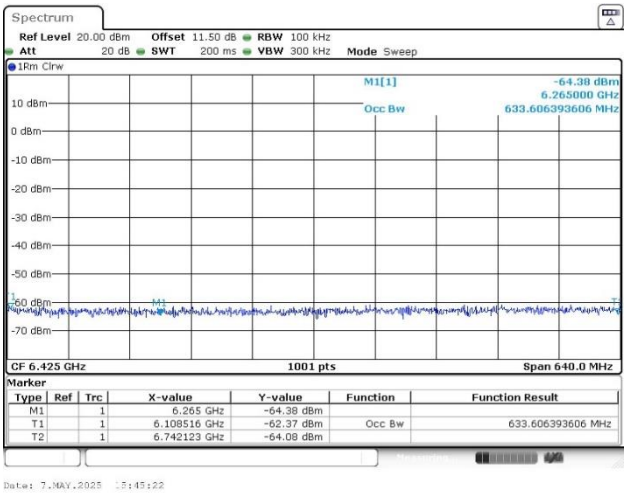
Incumbent freq @ 6270MHz



Incumbent freq @ 6425MHz



Incumbent freq @ 6580 MHz



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.

$$E=\frac{1000000\sqrt{30P}}{3}$$ µV/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 ≥ 3 MHz
   - Detector = Peak
   - Sweep time = auto
   - Trace mode = max hold

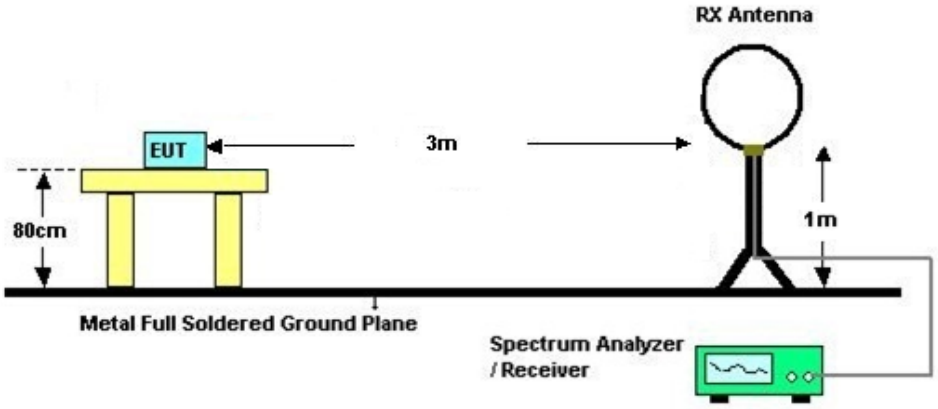
   (3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz

   - RBW = 1 MHz
   - VBW = 10 Hz, when duty cycle is no less than 98 percent.
   - VBW ≥ 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.

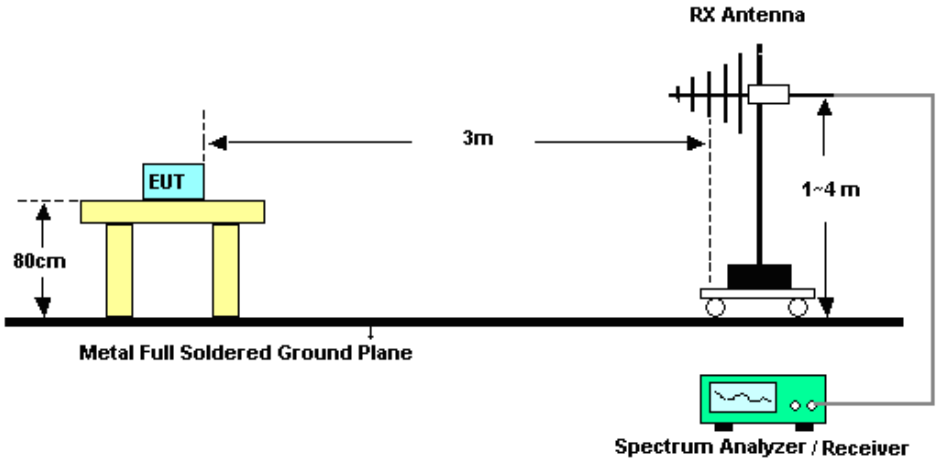
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband 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

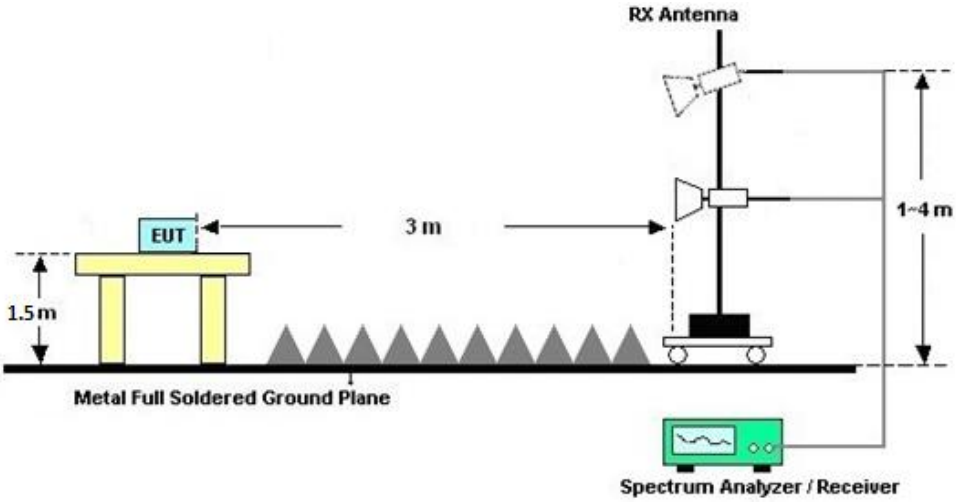
For radiated emissions below 30MHz



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.

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 (dBμV)	
	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.

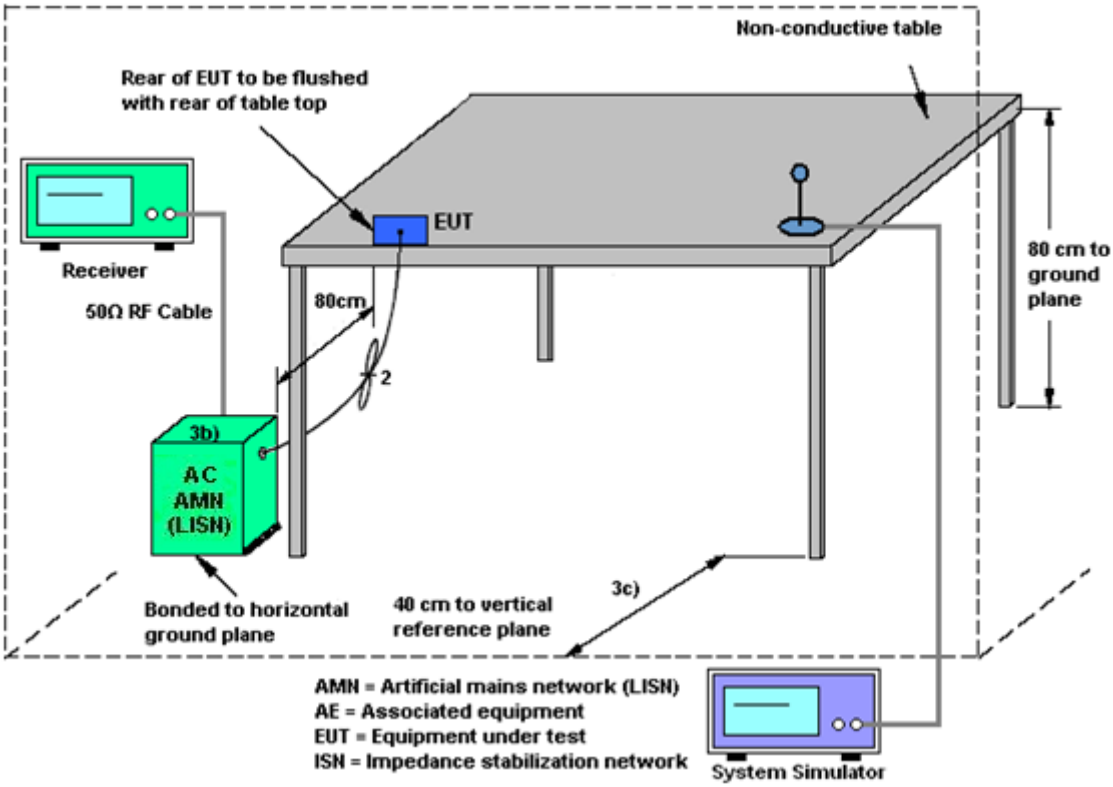
3.7.2 Measuring Instruments

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 CDD transmissions, directional gain is calculated as

For power, the directional gain GANT is set equal to the antenna having the highest gain, i.e.,

Directional gain = $G_{ANT\ MAX}$(Ant.1 Gain, Ant.2 Gain,…) + Array Gain, as following table for Power,

where Array Gain = 0 dB (i.e., no array gain) for NANT ≤ 4;

For PSD, the directional gain calculation is following,

Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \ldots + 10^{Gn/20})^2 / N_{ANT}]$ 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 NSS = 1)

<CDD Modes>

	Ant. 6 (dBi)	Ant. 17 (dBi)	DG for Power (dBi)	DG for PSD (dBi)
U-NII-5	-0.50	-0.50	-0.50	2.51
U-NII-6	-2.30	-2.30	-2.30	0.71
U-NII-7	-0.70	-0.70	-0.70	2.31
U-NII-8	-2.00	-2.00	-2.00	1.01

4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101078	10Hz~40GHz	Apr. 02, 2025	May 02, 2025~ May 10, 2025	Apr. 01, 2026	Conducted (TH01-SZ)
Pulse Power Senor	Anritsu	MA2411B	1339473	30MHz~40GHz	Dec. 25, 2024	May 02, 2025~ May 10, 2025	Dec. 24, 2025	Conducted (TH01-SZ)
Power Meter	Anritsu	ML2495A	1218010	50MHz Bandwidth	Oct. 14, 2024	May 02, 2025~ May 10, 2025	Oct. 13, 2025	Conducted (TH01-SZ)
Thermal Chamber	Ten Billion Hongzhangroup	LP-150U	H2014081803	-40~+150°C	Jul. 03, 2024	May 02, 2025~ May 10, 2025	Jul. 02, 2025	Conducted (TH01-SZ)
EMI Test Receiver&SA	KEYSIGHT	N9038A	MY54450083	20Hz~8.4GHz	Apr. 02, 2025	May 17, 2025~ May 26, 2025	Apr. 01, 2026	Radiation (03CH03-SZ)
EXA Signal Analyzer	KEYSIGHT	N9010B	MY59071191	10KHz-44GHz	Apr. 02, 2025	May 17, 2025~ May 26, 2025	Apr. 01, 2026	Radiation (03CH03-SZ)
Loop Antenna	R&S	HFH2-Z2E	101141	9kHz~30MHz	Dec. 28, 2024	May 17, 2025~ May 26, 2025	Dec. 27, 2025	Radiation (03CH03-SZ)
Bilog Antenna	TeseQ	CBL6112D	35408	30MHz-2GHz	Aug. 20, 2023	May 17, 2025~ May 26, 2025	Aug. 19, 2025	Radiation (03CH03-SZ)
Double Ridege Guide Antenna	ETS-Lindgren	Burgeon-3117	00240107	1GHz~18GHz	Jul. 13, 2024	May 17, 2025~ May 26, 2025	Jul. 12, 2025	Radiation (03CH03-SZ)
HF Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz	Jul. 03, 2024	May 17, 2025~ May 26, 2025	Jul. 02, 2025	Radiation (03CH03-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18Ghz-40GHz	Apr. 03, 2025	May 17, 2025~ May 26, 2025	Apr. 02, 2027	Radiation (03CH03-SZ)
Amplifier	EM Electronics	EM330	060756	0.01Hz ~3000MHz	Apr. 02, 2025	May 17, 2025~ May 26, 2025	Apr. 01, 2026	Radiation (03CH03-SZ)
HF Amplifier	MITEQ	AMF-7D-00101800-30-10P-R	1943528	1GHz~18GHz	Oct. 14, 2024	May 17, 2025~ May 26, 2025	Oct. 13, 2025	Radiation (03CH03-SZ)
HF Amplifier	Keysight	83017A	MY53270357	500MHz~26.5GHz	Apr. 02, 2025	May 17, 2025~ May 26, 2025	Apr. 01, 2026	Radiation (03CH03-SZ)
AC Power Source	Chroma	61601	616010002729	N/A	Oct. 18, 2024	May 17, 2025~ May 26, 2025	Oct. 17, 2025	Radiation (03CH03-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	May 17, 2025~ May 26, 2025	NCR	Radiation (03CH03-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	May 17, 2025~ May 26, 2025	NCR	Radiation (03CH03-SZ)
EMI Receiver	R&S	ESR7	102297	9kHz~7GHz;	Jul. 03, 2024	May 14, 2025	Jul. 02, 2025	Conduction (CO02-SZ)
AC LISN	R&S	ENV216	101499	9kHz~30MHz	Jul. 03, 2024	May 14, 2025	Jul. 02, 2025	Conduction (CO02-SZ)
AC Power Source	CHROMA	61601	616010002470	100Vac~250Vac	Dec. 25, 2024	May 14, 2025	Dec. 24, 2025	Conduction (CO02-SZ)
Signal Analyzer	R&S	FSV7	101473	10Hz~7GHz	Dec. 25, 2024	May 07, 2025	Dec. 24, 2025	CBP (DFS01-SZ)
MXG-B RF Vector Signal Generator	Keysight	N5182B	MY56200424	9kHz~6GHz	Apr. 02, 2025	May 07, 2025	Apr. 01, 2026	CBP (DFS01-SZ)
Combiner	TOJOIN	PS-2AM-0460	SZE14011007	0.4~6GHz	Sep. 05, 2024	May 07, 2025	Sep. 04, 2025	CBP (DFS01-SZ)

NCR: No Calibration Required

5 Measurement Uncertainty

Uncertainty of Conducted Measurement

Test Item	Uncertainty
Conducted Spurious Emission & Bandedge	±1.34 dB
Occupied Channel Bandwidth	±0.012 MHz
Conducted Power	±1.34 dB
Conducted Power Spectral Density	±1.32 dB
Frequency	±1.3 Hz
Conducted Generated signal Levels	±0.62 dB
Conducted Time	0.38%

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.5 dB

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.0 dB

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.9 dB

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.0 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
11BE20MIMO	Ant6	5955	19.72	5945.13	5964.85	≤320	PASS
	Ant17	5955	19.82	5945.07	5964.89	≤320	PASS
	Ant6	6175	19.80	6165.06	6184.86	≤320	PASS
	Ant17	6175	19.82	6165.05	6184.87	≤320	PASS
	Ant6	6415	19.76	6405.11	6424.87	≤320	PASS
	Ant17	6415	19.77	6405.09	6424.86	≤320	PASS
	Ant6	6435	19.78	6425.12	6444.90	≤320	PASS
	Ant17	6435	19.82	6425.09	6444.91	≤320	PASS
	Ant6	6475	19.77	6465.10	6484.87	≤320	PASS
	Ant17	6475	19.76	6465.10	6484.86	≤320	PASS
	Ant6	6515	19.79	6505.07	6524.86	≤320	PASS
	Ant17	6515	19.78	6505.10	6524.88	≤320	PASS
	Ant6	6535	19.86	6525.07	6544.93	≤320	PASS
	Ant17	6535	19.80	6525.08	6544.88	≤320	PASS
	Ant6	6695	19.80	6685.06	6704.86	≤320	PASS
	Ant17	6695	19.75	6685.13	6704.88	≤320	PASS
	Ant6	6855	19.80	6845.08	6864.88	≤320	PASS
	Ant17	6855	19.75	6845.10	6864.85	≤320	PASS
	Ant6	6875	19.79	6865.08	6884.87	≤320	PASS
	Ant17	6875	19.80	6865.08	6884.88	≤320	PASS
	Ant6	6895	19.75	6885.12	6904.87	≤320	PASS
	Ant17	6895	19.81	6885.07	6904.88	≤320	PASS
	Ant6	6995	19.68	6985.12	7004.80	≤320	PASS
	Ant17	6995	19.61	6985.21	7004.82	≤320	PASS
	Ant6	7095	19.67	7085.13	7104.80	≤320	PASS
	Ant17	7095	19.73	7085.10	7104.83	≤320	PASS
11BE40MIMO	Ant6	5965	39.46	5945.28	5984.74	≤320	PASS
	Ant17	5965	39.48	5945.20	5984.68	≤320	PASS
	Ant6	6165	39.48	6145.24	6184.72	≤320	PASS
	Ant17	6165	39.60	6145.22	6184.82	≤320	PASS
	Ant6	6405	39.54	6385.20	6424.74	≤320	PASS
	Ant17	6405	39.56	6385.22	6424.78	≤320	PASS
	Ant6	6445	39.36	6425.26	6464.62	≤320	PASS
	Ant17	6445	39.48	6425.24	6464.72	≤320	PASS
	Ant6	6485	39.32	6465.32	6504.64	≤320	PASS
	Ant17	6485	39.32	6465.24	6504.56	≤320	PASS
	Ant6	6525	39.54	6505.22	6544.76	≤320	PASS
	Ant17	6525	39.54	6505.20	6544.74	≤320	PASS
	Ant6	6565	39.56	6545.16	6584.72	≤320	PASS
	Ant17	6565	39.52	6545.20	6584.72	≤320	PASS
	Ant6	6685	39.38	6665.24	6704.62	≤320	PASS
	Ant17	6685	39.50	6665.20	6704.70	≤320	PASS
	Ant6	6845	39.36	6825.28	6864.64	≤320	PASS

	Ant17	6845	39.48	6825.20	6864.68	≤320	PASS
	Ant6	6885	39.62	6865.10	6904.72	≤320	PASS
	Ant17	6885	39.44	6865.30	6904.74	≤320	PASS
	Ant6	6925	39.58	6905.22	6944.80	≤320	PASS
	Ant17	6925	39.54	6905.20	6944.74	≤320	PASS
	Ant6	6965	41.18	6943.54	6984.72	≤320	PASS
	Ant17	6965	39.56	6945.18	6984.74	≤320	PASS
	Ant6	7085	39.54	7065.30	7104.84	≤320	PASS
	Ant17	7085	39.96	7064.70	7104.66	≤320	PASS
11BE80MIMO	Ant6	5985	80.12	5944.88	6025.00	≤320	PASS
	Ant17	5985	80.04	5944.96	6025.00	≤320	PASS
	Ant6	6145	80.04	6104.92	6184.96	≤320	PASS
	Ant17	6145	80.08	6104.92	6185.00	≤320	PASS
	Ant6	6385	80.04	6344.96	6425.00	≤320	PASS
	Ant17	6385	80.12	6344.96	6425.08	≤320	PASS
	Ant6	6465	80.08	6425.00	6505.08	≤320	PASS
	Ant17	6465	80.16	6424.92	6505.08	≤320	PASS
	Ant6	6545	80.20	6504.84	6585.04	≤320	PASS
	Ant17	6545	80.04	6504.96	6585.00	≤320	PASS
	Ant6	6625	80.04	6584.96	6665.00	≤320	PASS
	Ant17	6625	80.08	6584.88	6664.96	≤320	PASS
	Ant6	6705	80.16	6664.88	6745.04	≤320	PASS
	Ant17	6705	80.04	6664.96	6745.00	≤320	PASS
	Ant6	6785	79.96	6745.00	6824.96	≤320	PASS
	Ant17	6785	80.08	6744.92	6825.00	≤320	PASS
	Ant6	6865	80.16	6824.92	6905.08	≤320	PASS
	Ant17	6865	80.12	6825.00	6905.12	≤320	PASS
	Ant6	6945	79.96	6905.00	6984.96	≤320	PASS
	Ant17	6945	80.16	6904.84	6985.00	≤320	PASS
	Ant6	7025	80.08	6984.96	7065.04	≤320	PASS
	Ant17	7025	80.16	6984.96	7065.12	≤320	PASS
11BE160MIMO	Ant6	6025	161.92	5944.04	6105.96	≤320	PASS
	Ant17	6025	162.08	5943.88	6105.96	≤320	PASS
	Ant6	6185	161.68	6104.12	6265.80	≤320	PASS
	Ant17	6185	161.60	6104.12	6265.72	≤320	PASS
	Ant6	6345	161.68	6264.12	6425.80	≤320	PASS
	Ant17	6345	161.52	6264.20	6425.72	≤320	PASS
	Ant6	6505	161.68	6424.20	6585.88	≤320	PASS
	Ant17	6505	161.76	6424.20	6585.96	≤320	PASS
	Ant6	6665	161.60	6584.28	6745.88	≤320	PASS
	Ant17	6665	161.68	6584.12	6745.80	≤320	PASS
	Ant6	6825	161.92	6744.12	6906.04	≤320	PASS
	Ant17	6825	162.24	6743.88	6906.12	≤320	PASS
	Ant6	6985	161.76	6904.12	7065.88	≤320	PASS
	Ant17	6985	162.24	6903.80	7066.04	≤320	PASS
11BE320MIMO	Ant6	6105	328.16	5940.84	6269.00	---	---
	Ant17	6105	327.84	5941.00	6268.84	---	---
	Ant6	6265	328.16	6100.84	6429.00	---	---
	Ant17	6265	328.32	6100.52	6428.84	---	---
	Ant6	6425	478.72	6110.12	6588.84	---	---

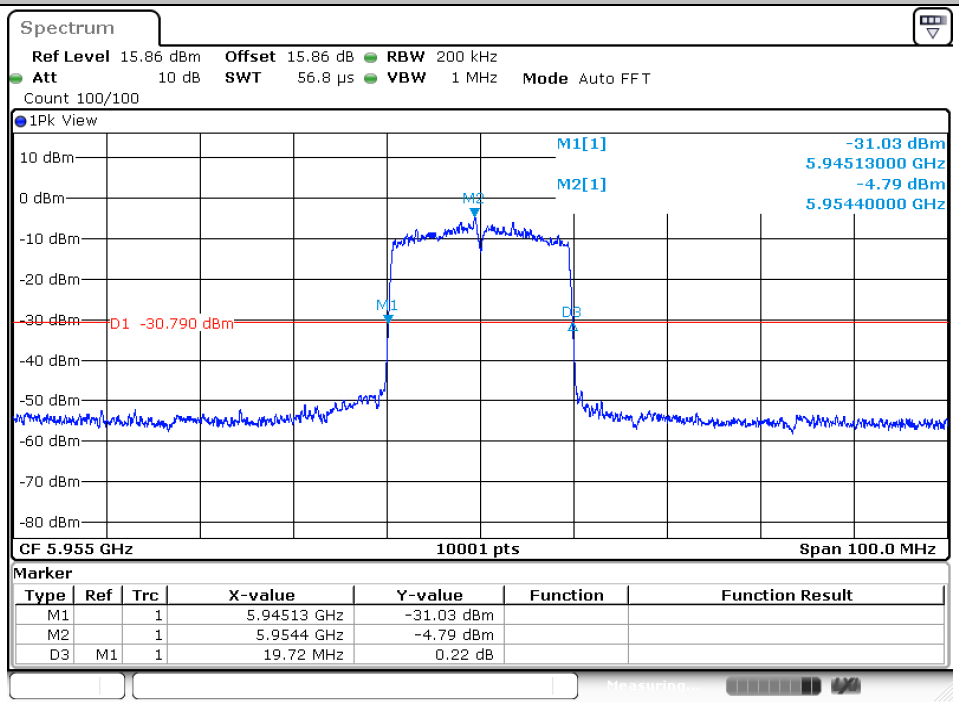
	Ant17	6425	327.84	6261.00	6588.84	---	---
	Ant6	6585	334.40	6414.44	6748.84	---	---
	Ant17	6585	328.00	6421.16	6749.16	---	---
	Ant6	6745	481.28	6428.20	6909.48	---	---
	Ant17	6745	329.92	6579.24	6909.16	---	---
	Ant6	6905	479.68	6589.16	7068.84	---	---
	Ant17	6905	330.40	6738.44	7068.84	---	---

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

11BE20MIMO_Ant6_5955



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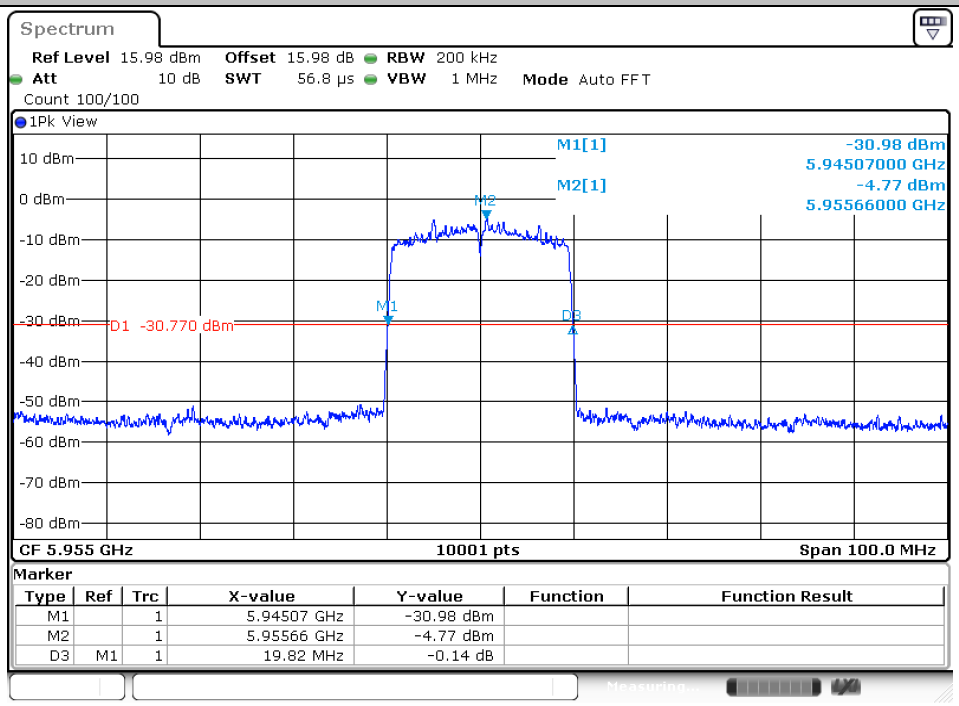

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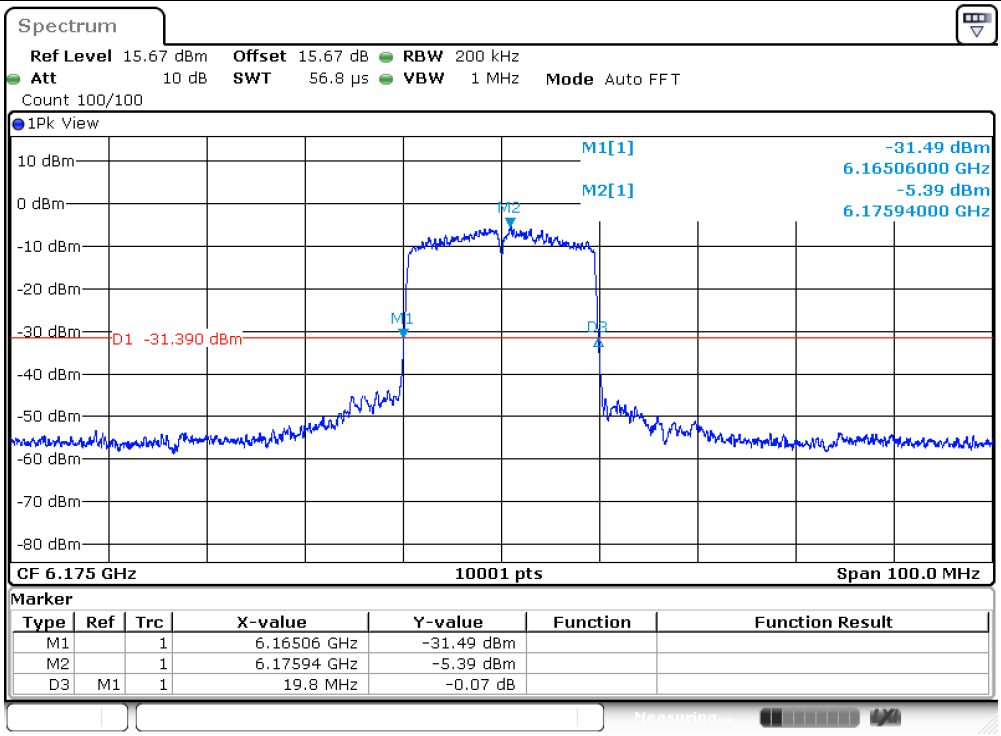

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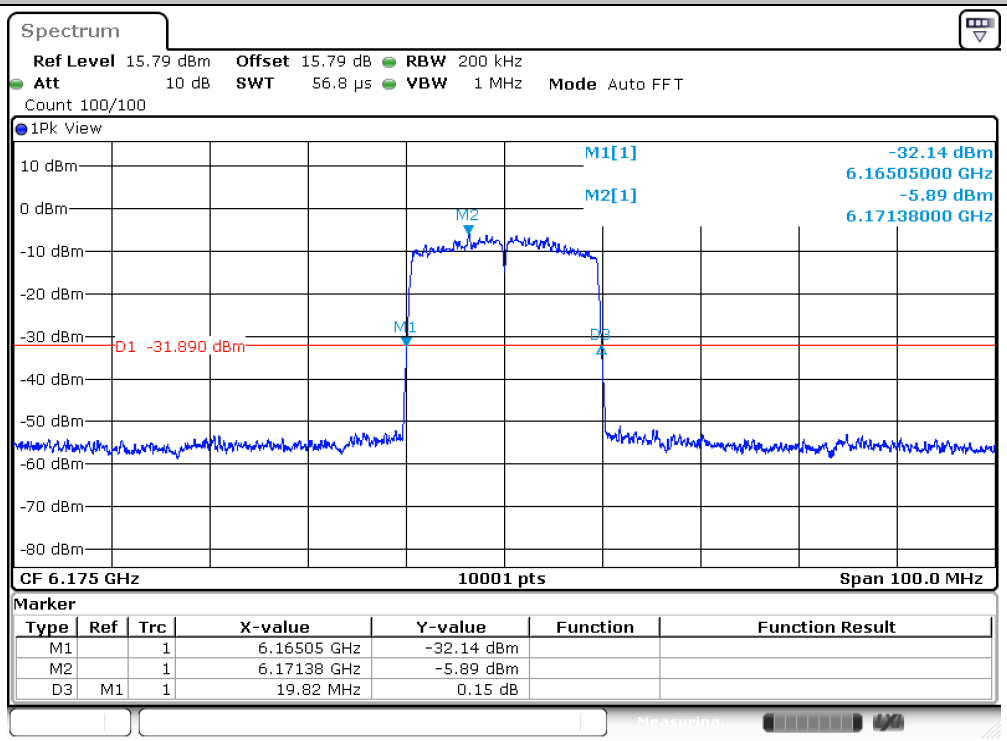

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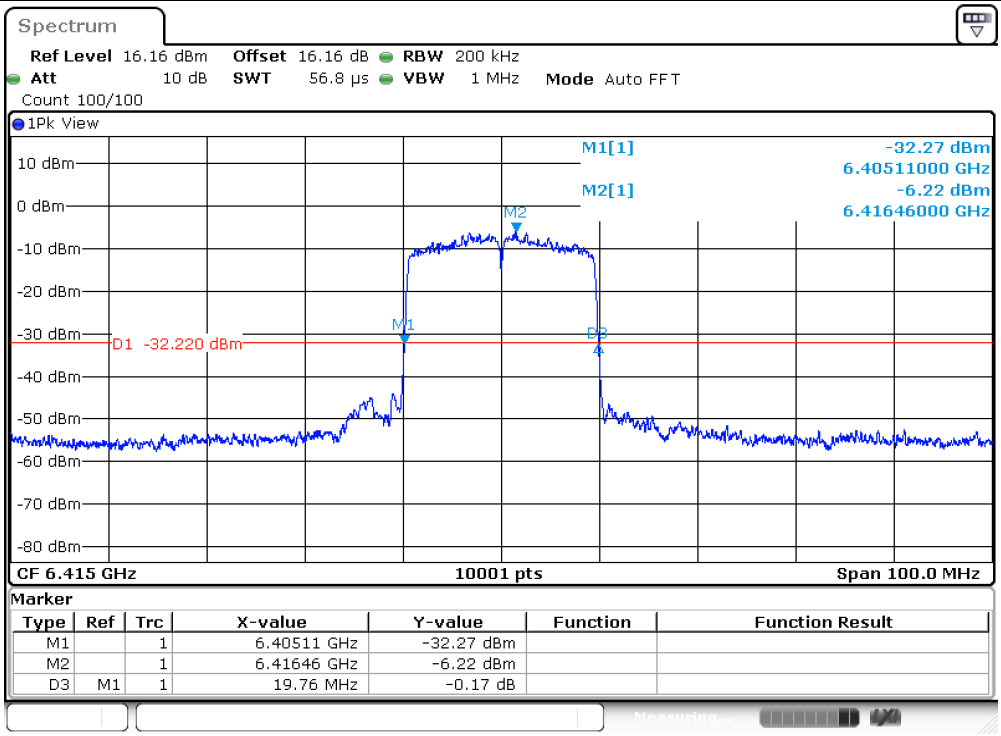

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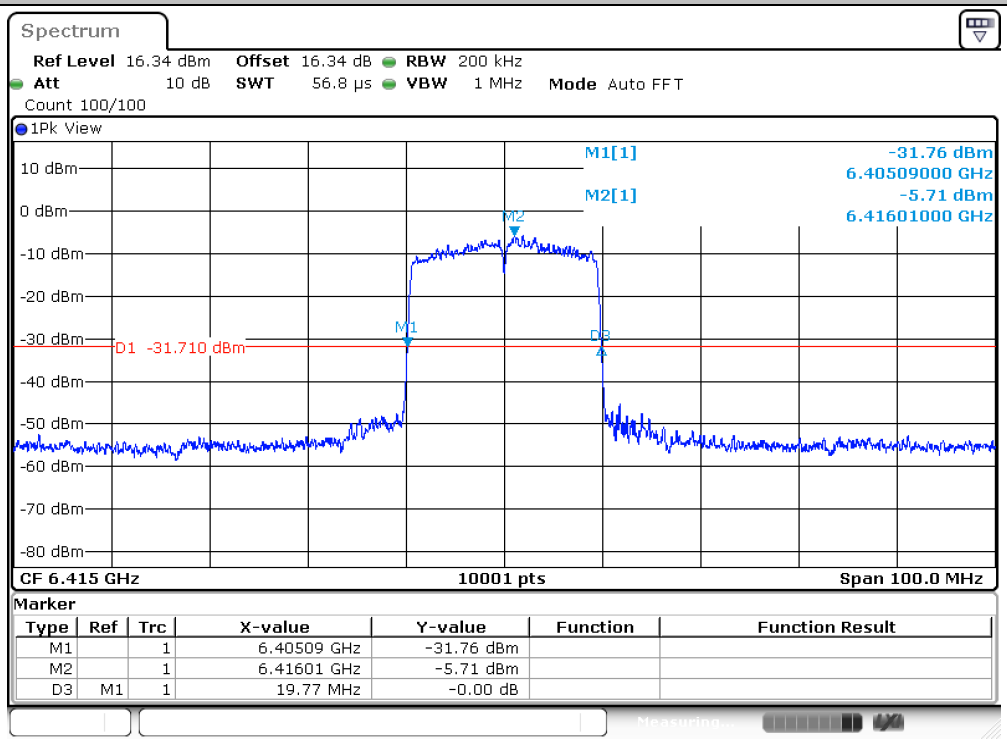

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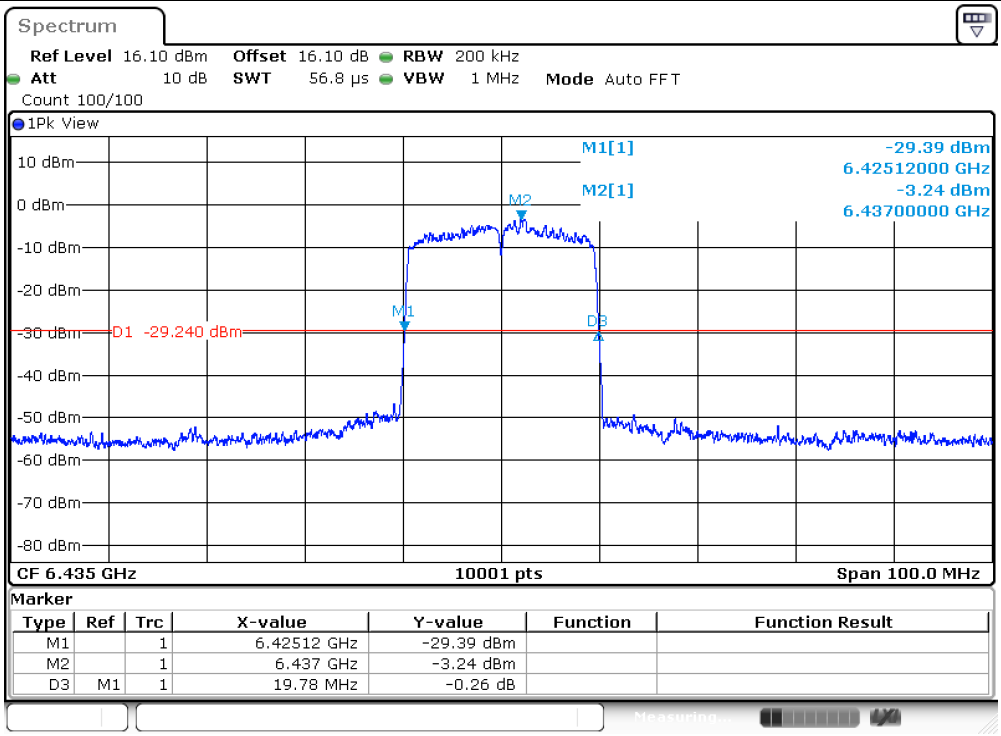

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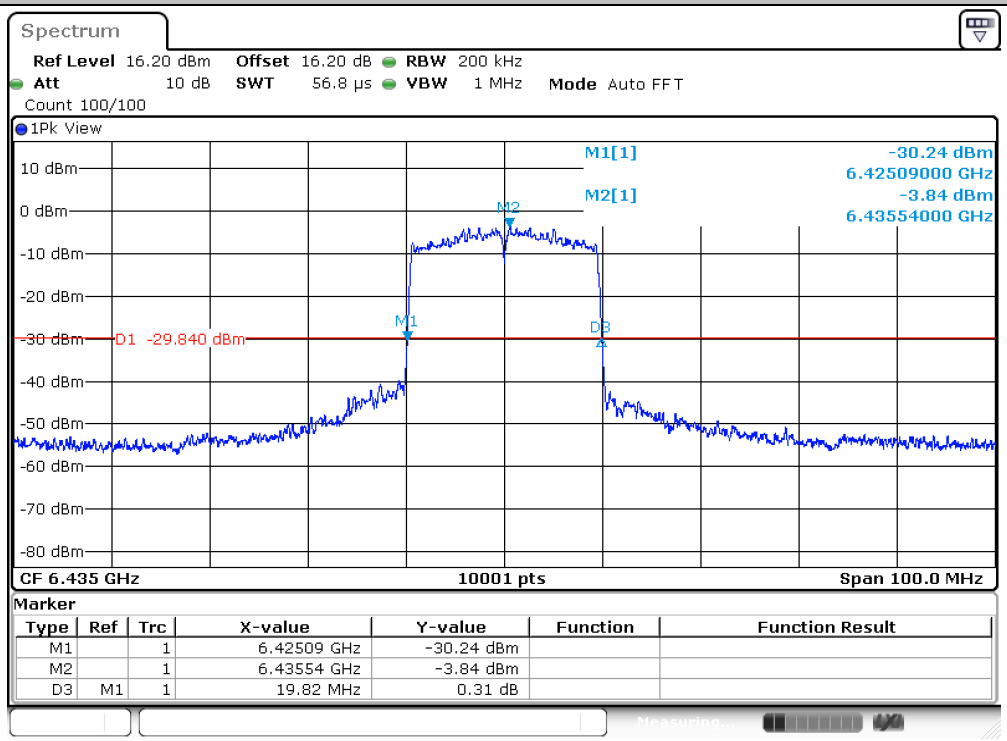

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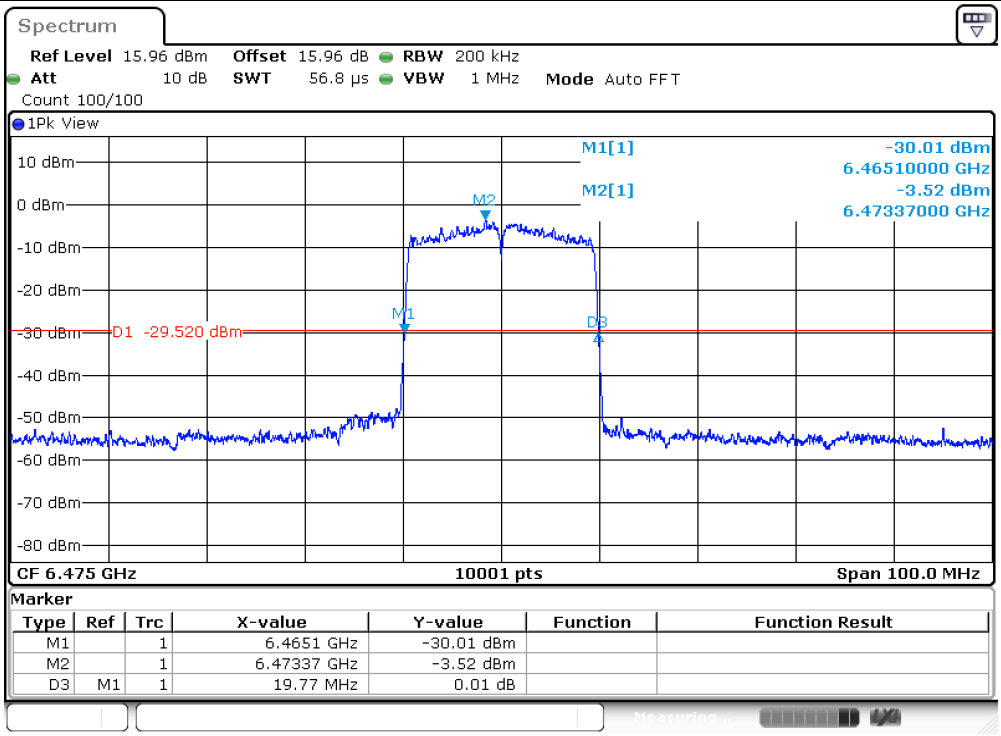

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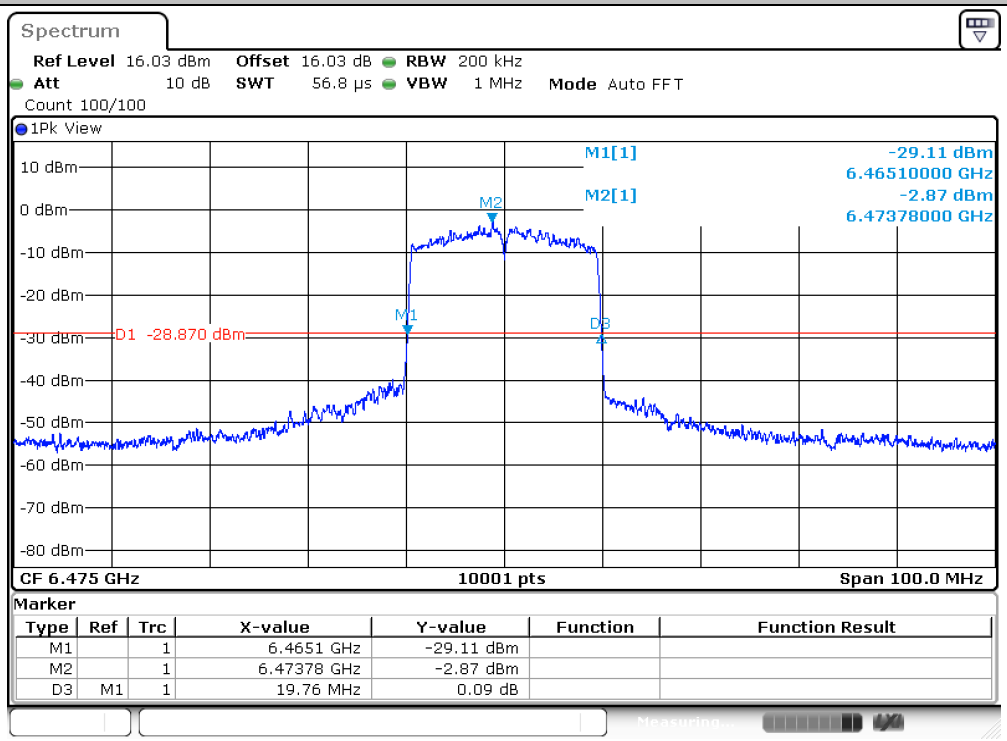

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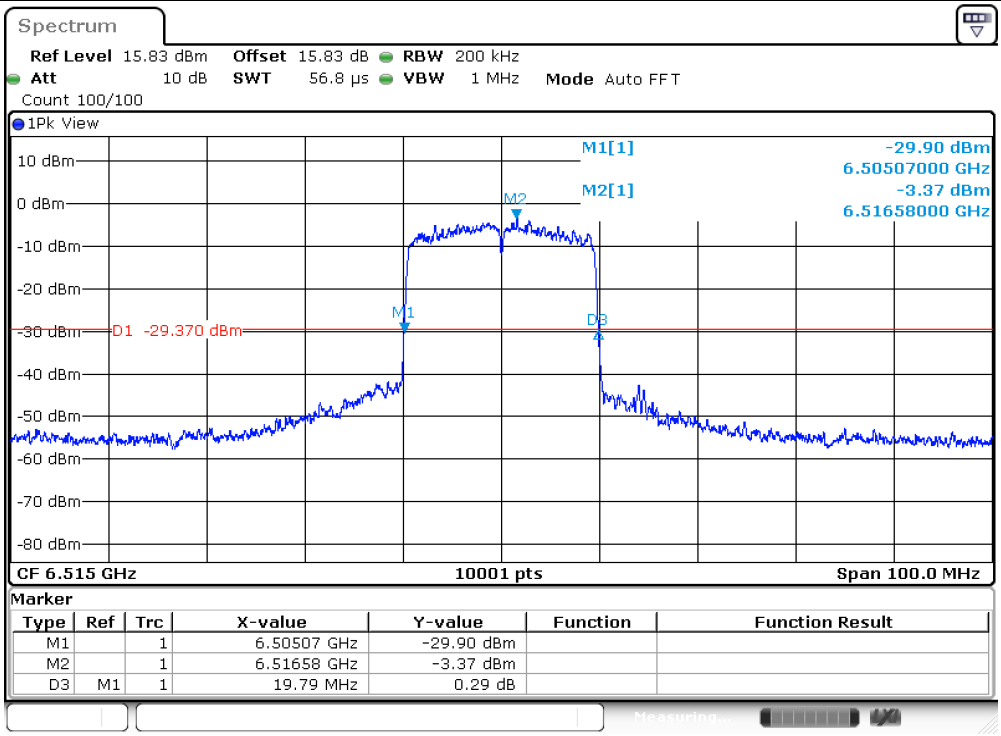

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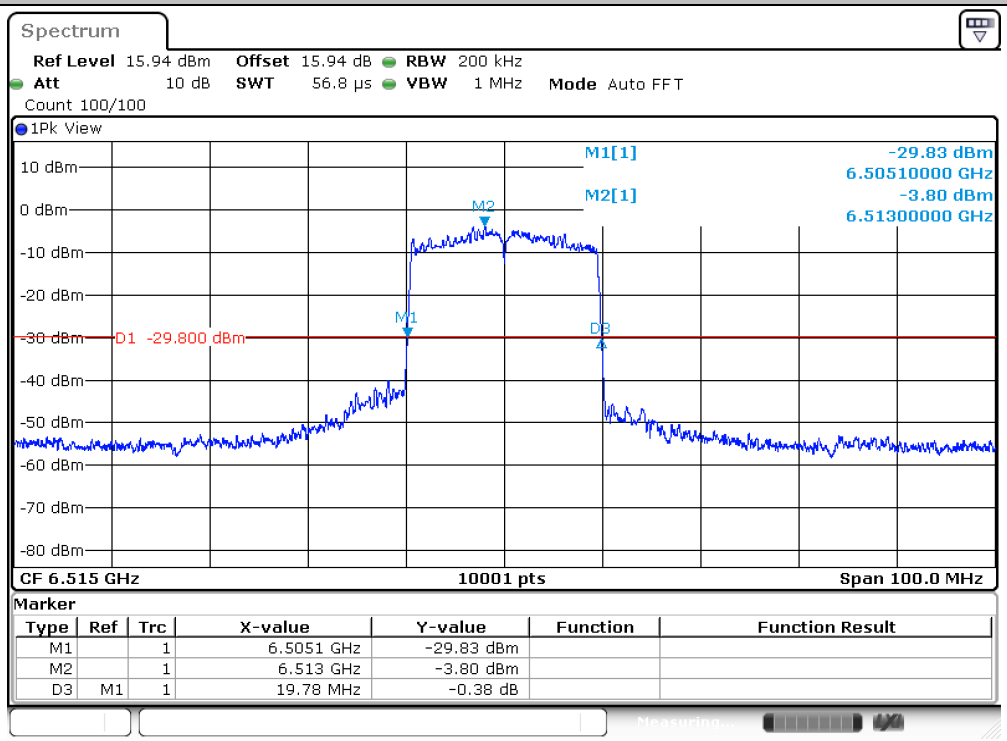

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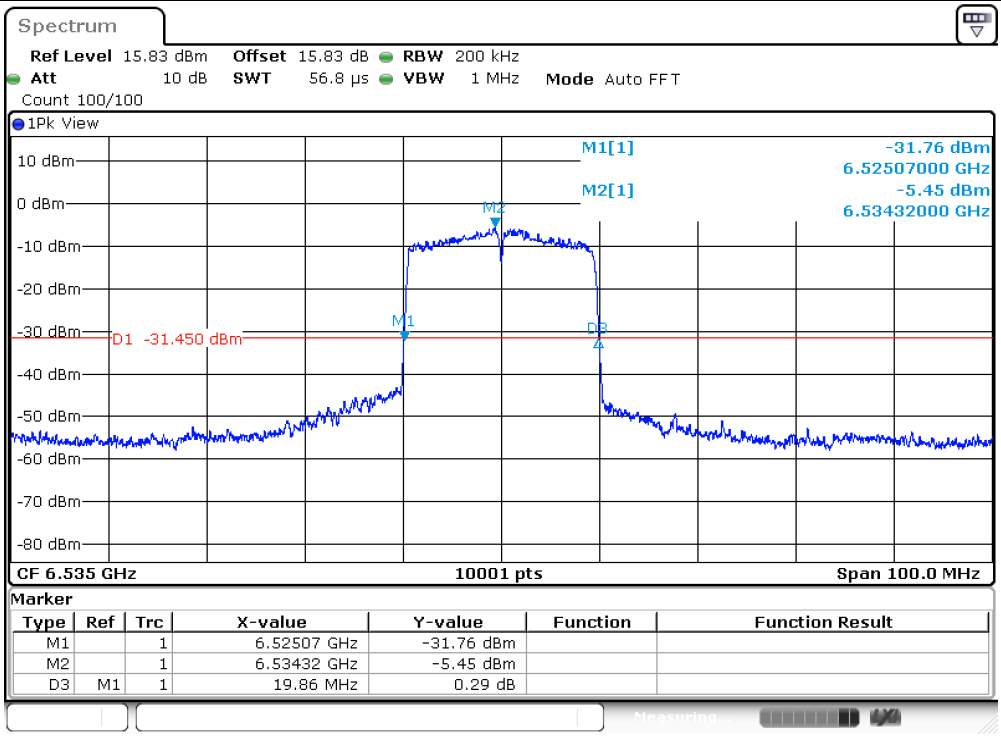

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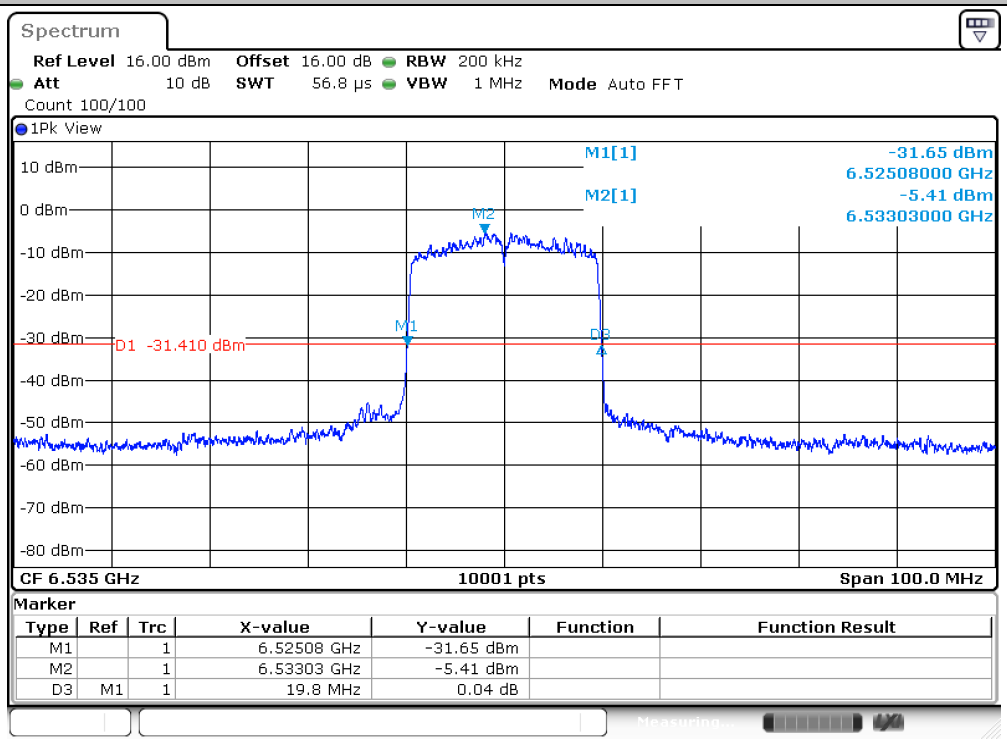

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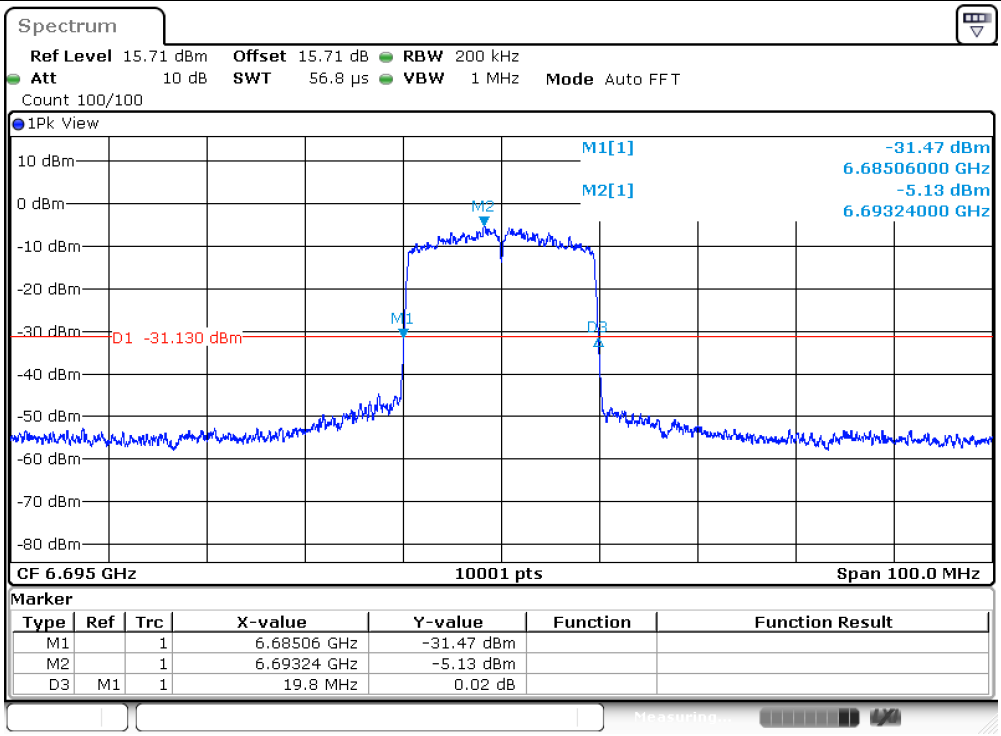

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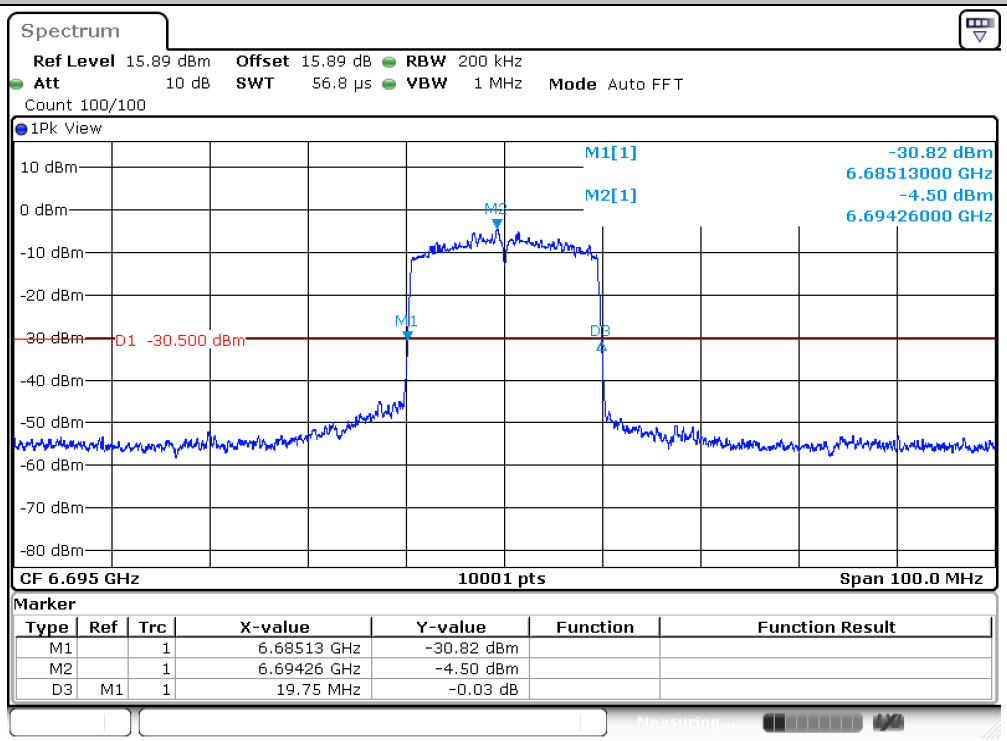

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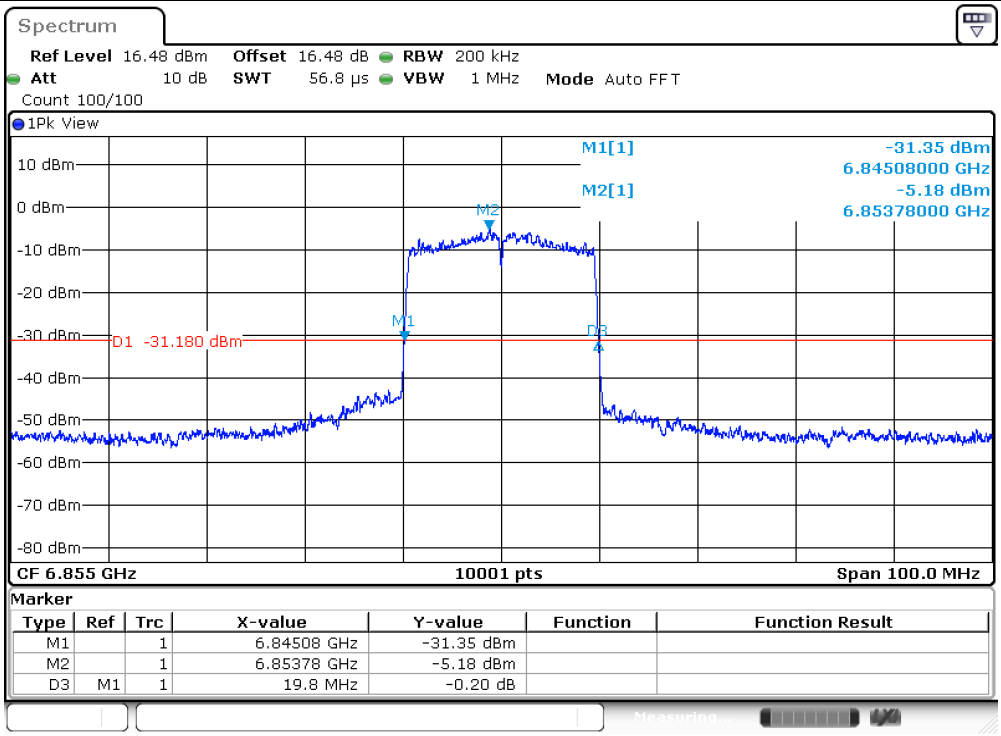

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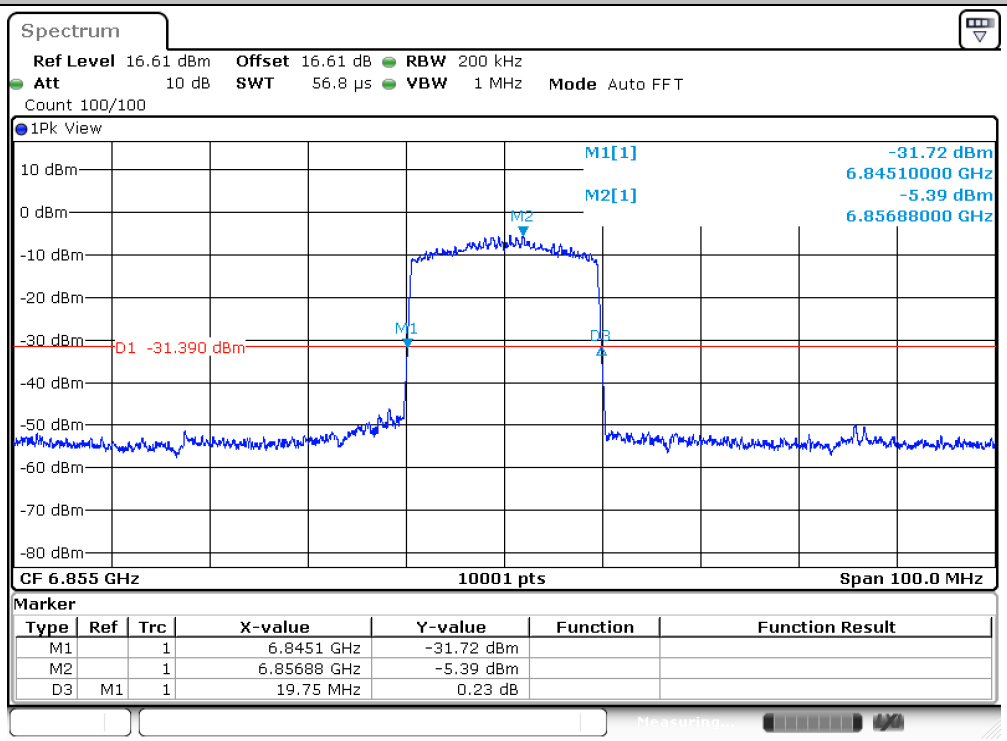

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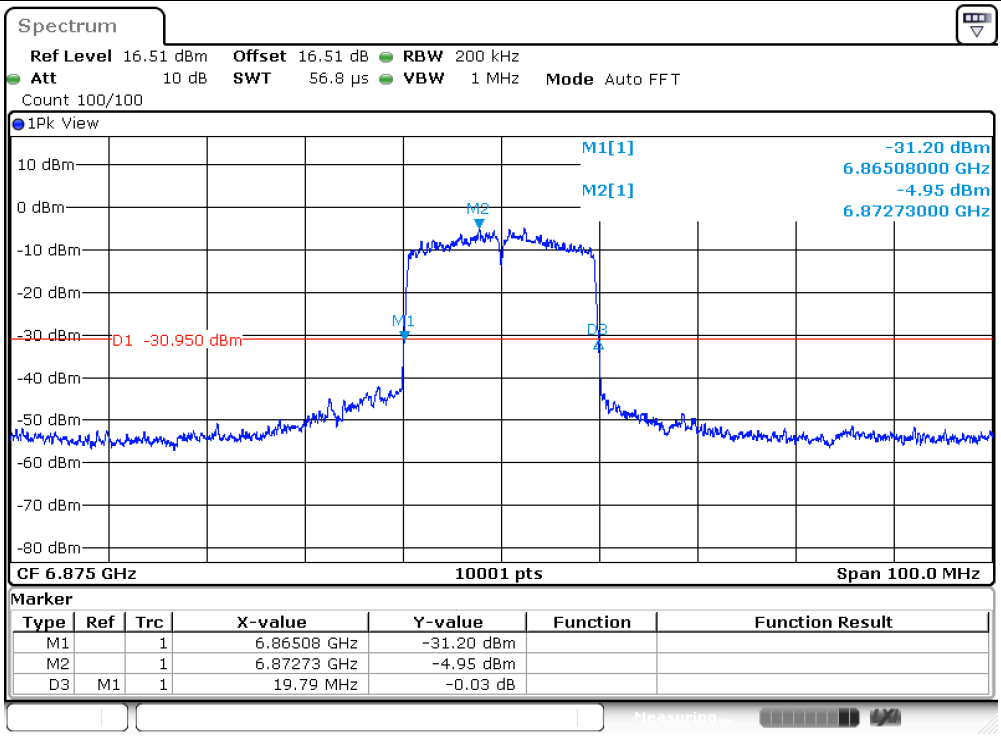
11BE20MIMO_Ant6_6875



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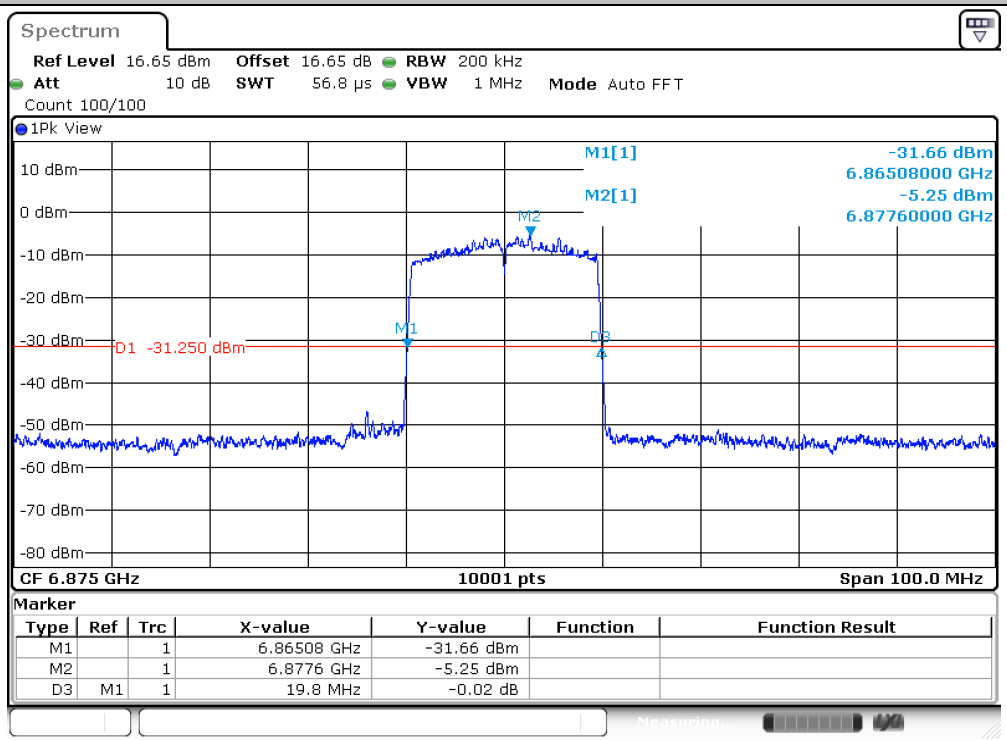

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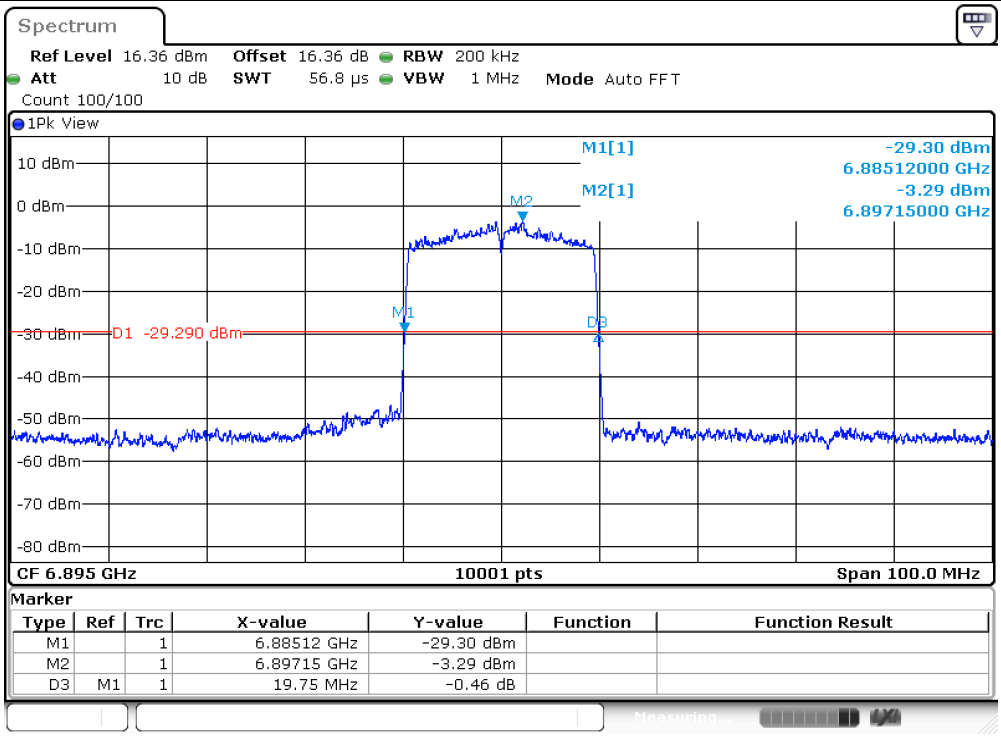

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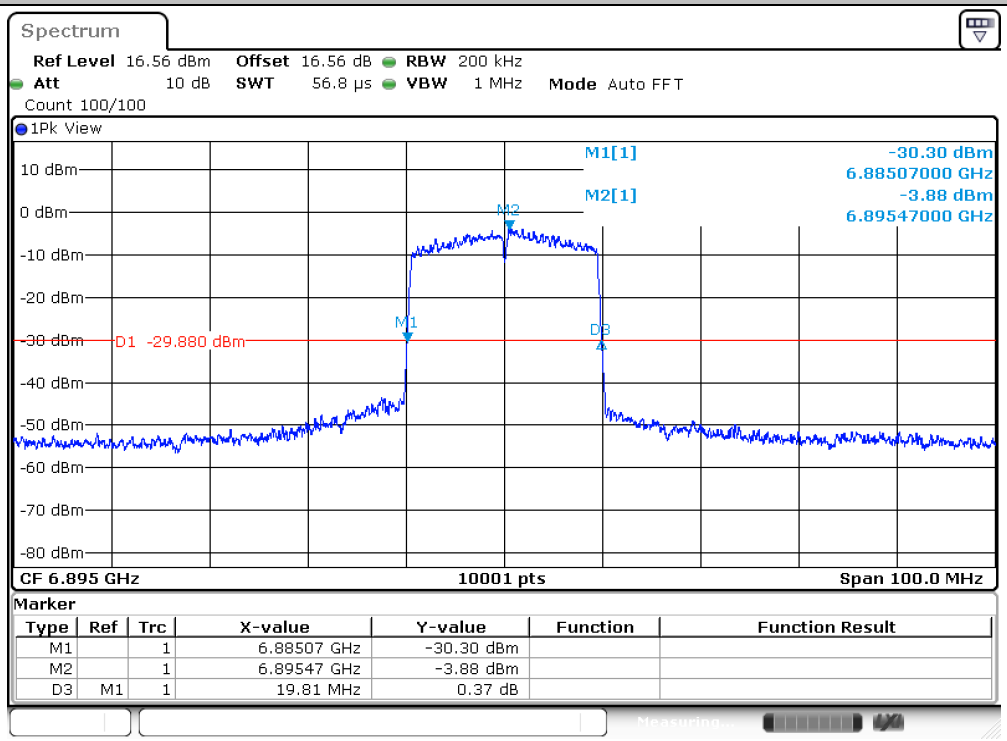

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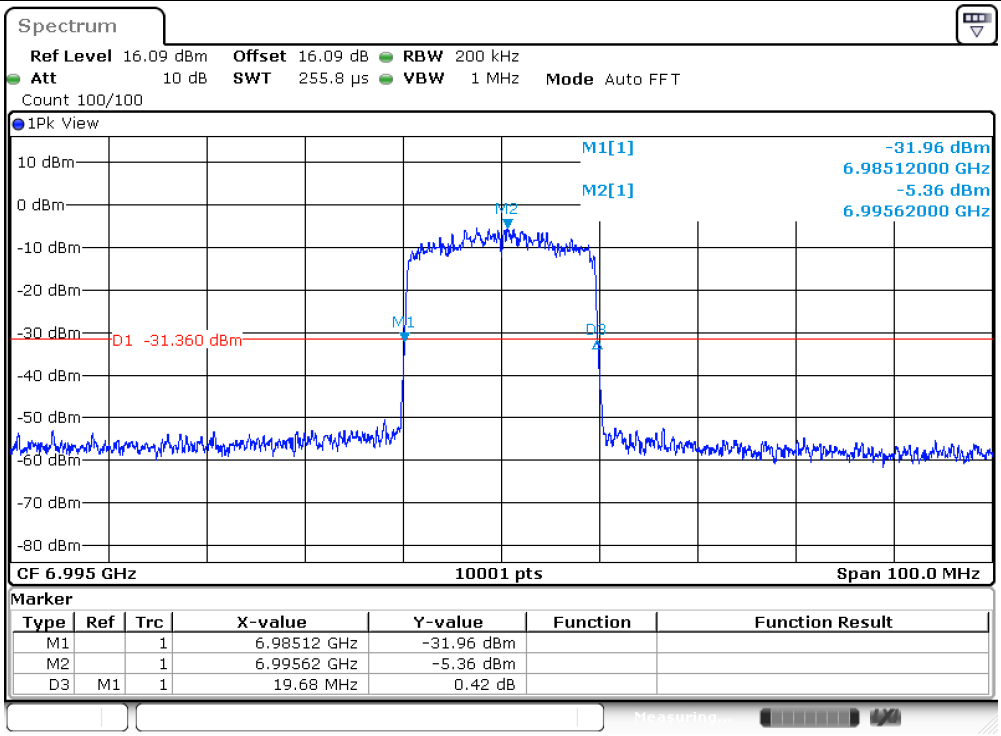

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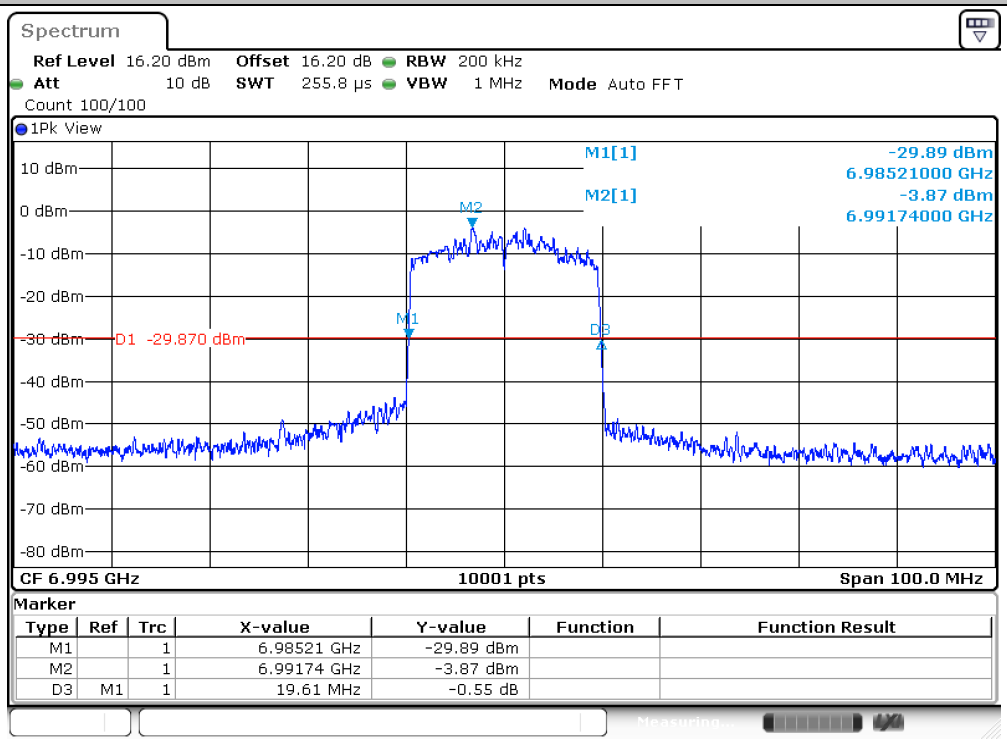

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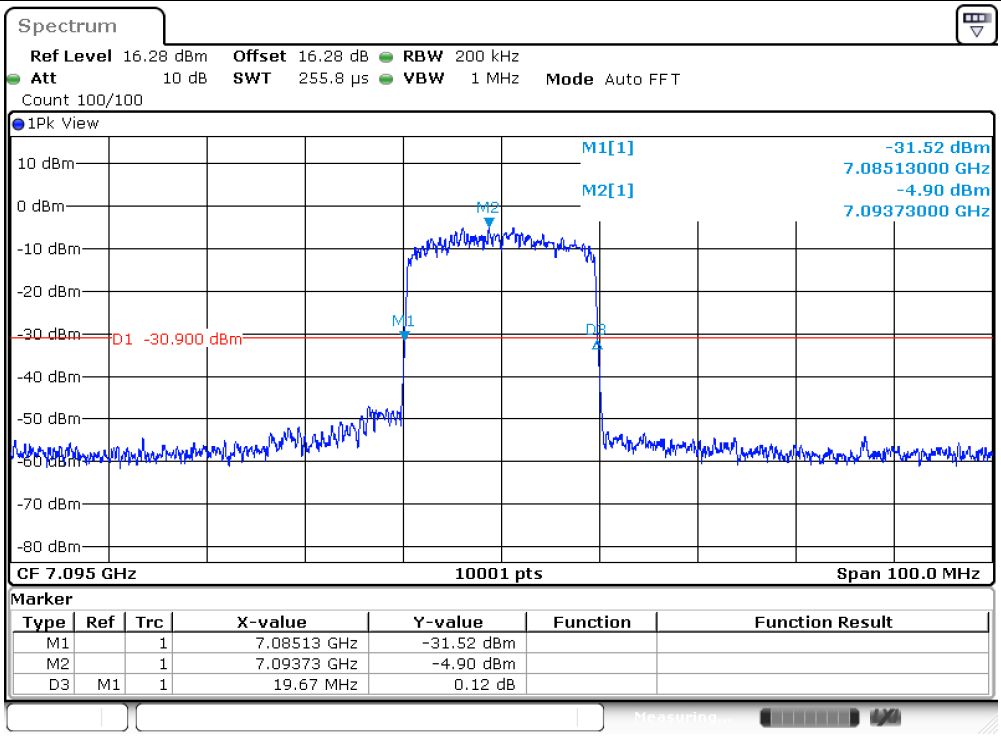

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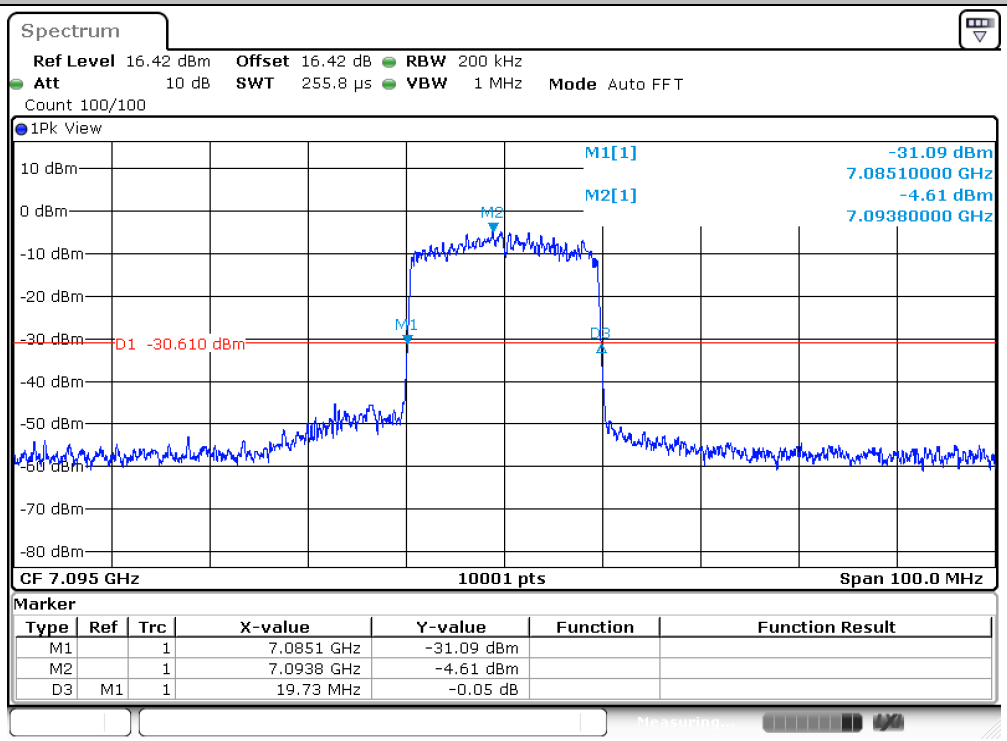

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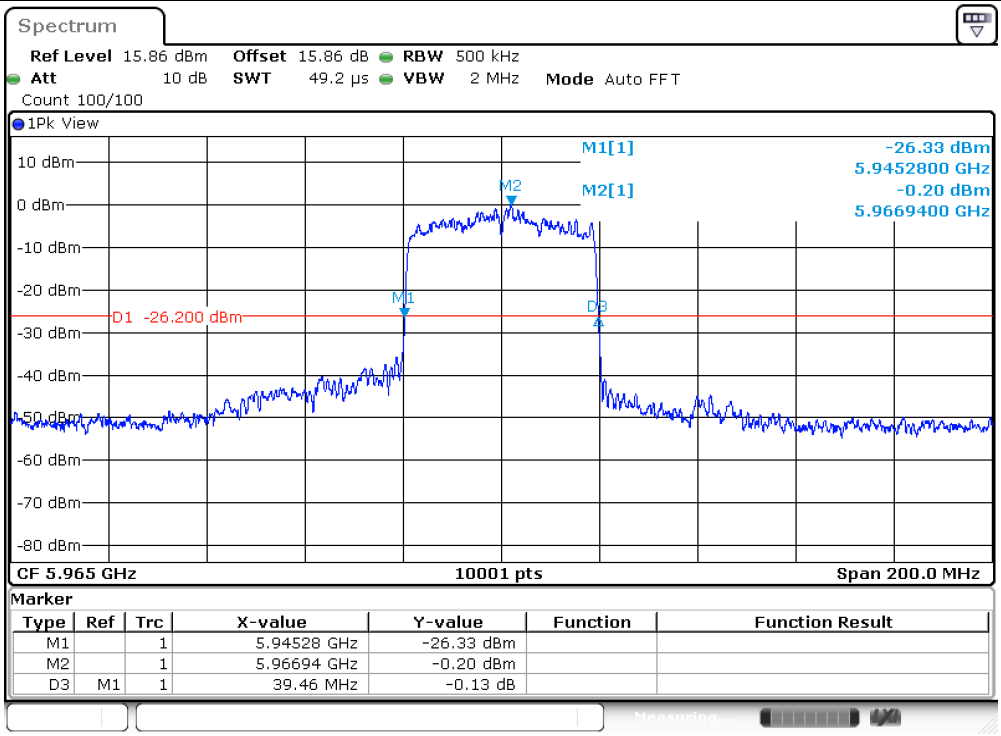
11BE40MIMO_Ant6_5965



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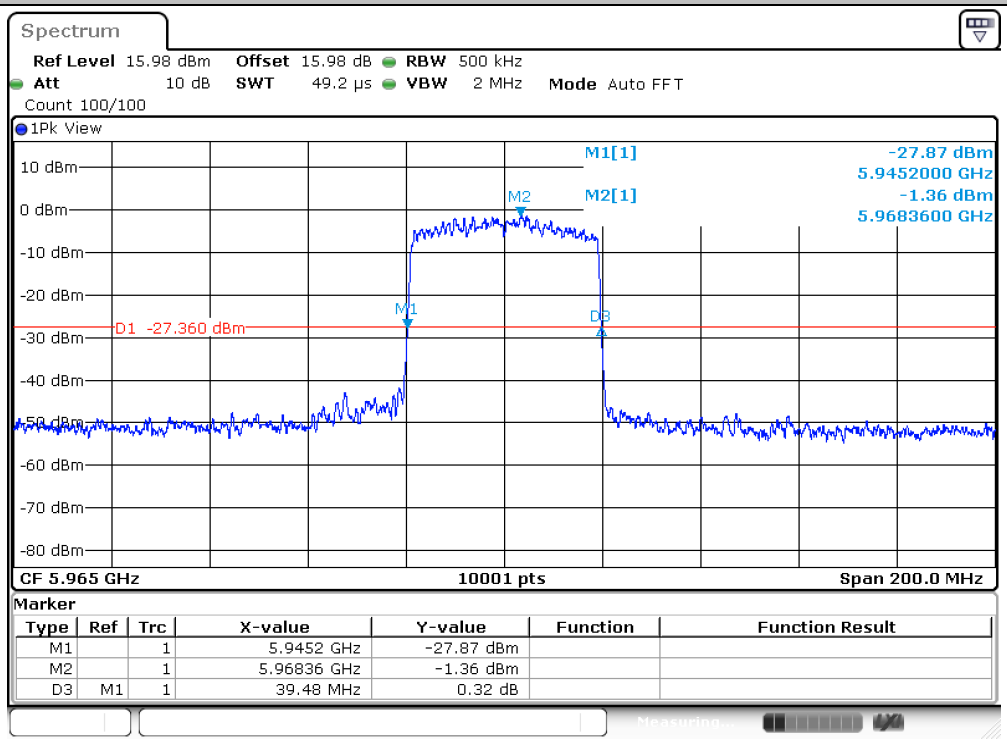

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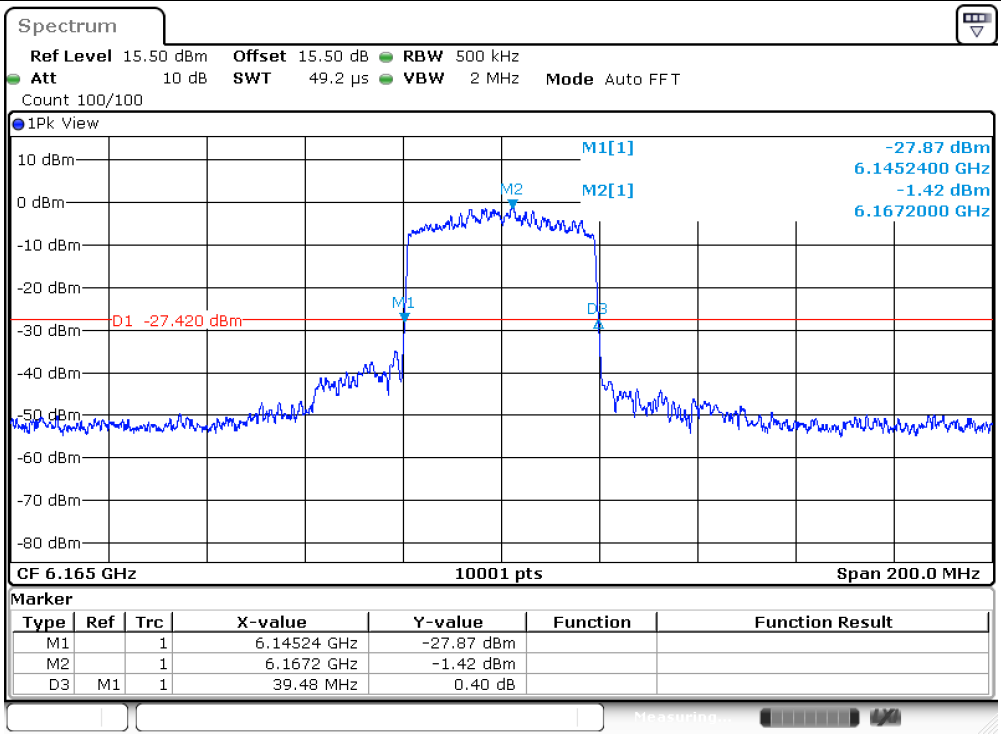

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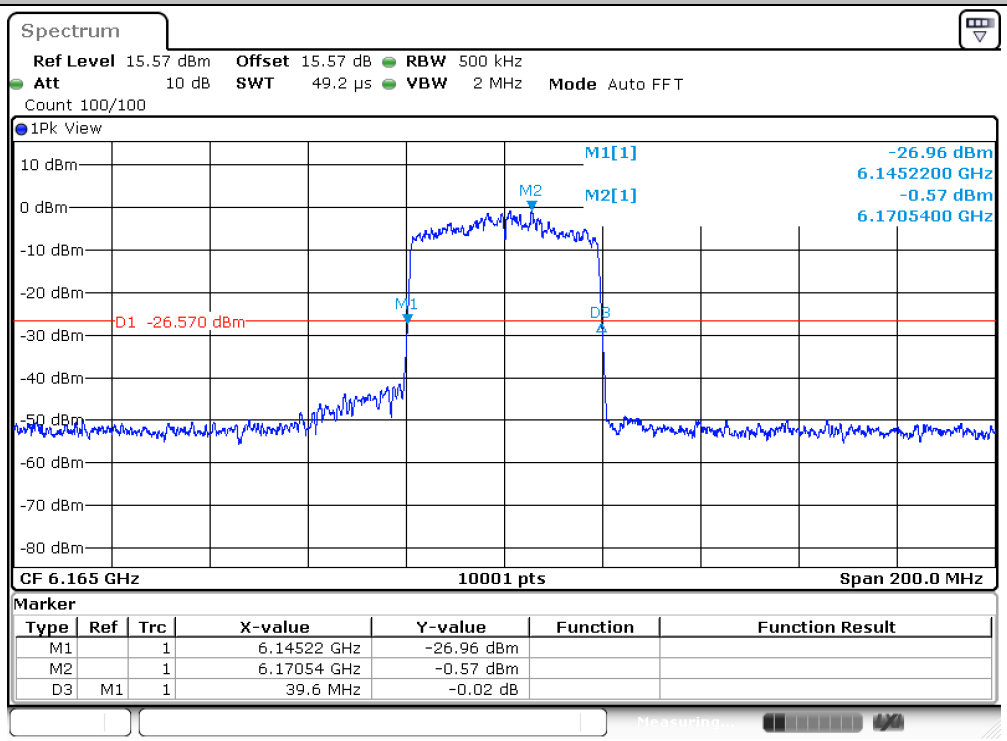

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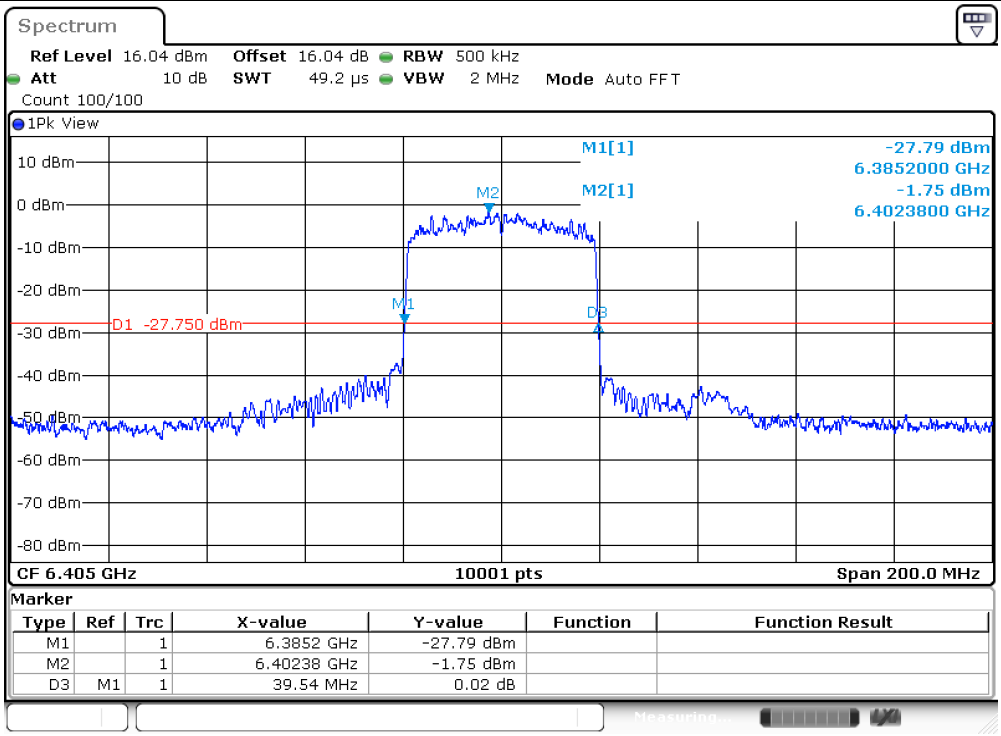

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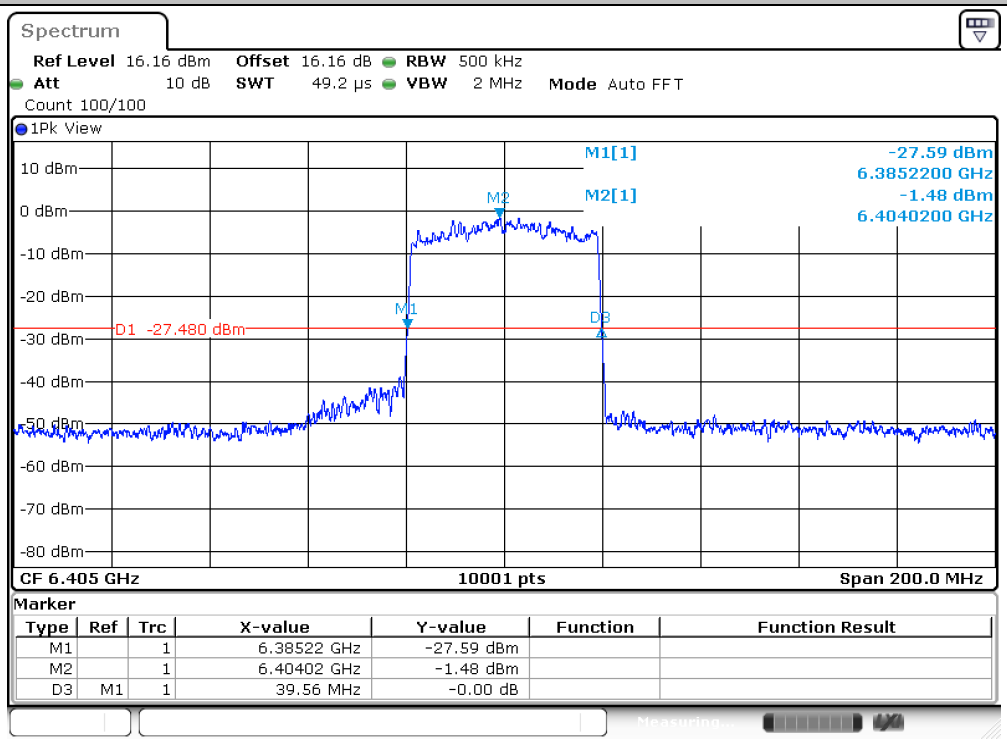

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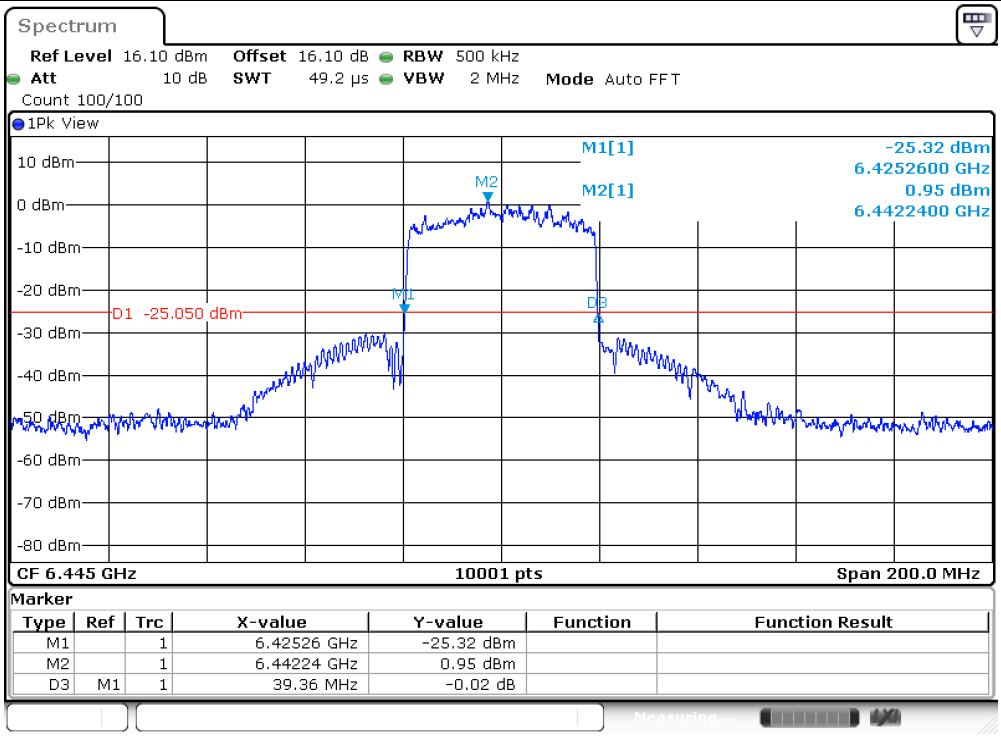

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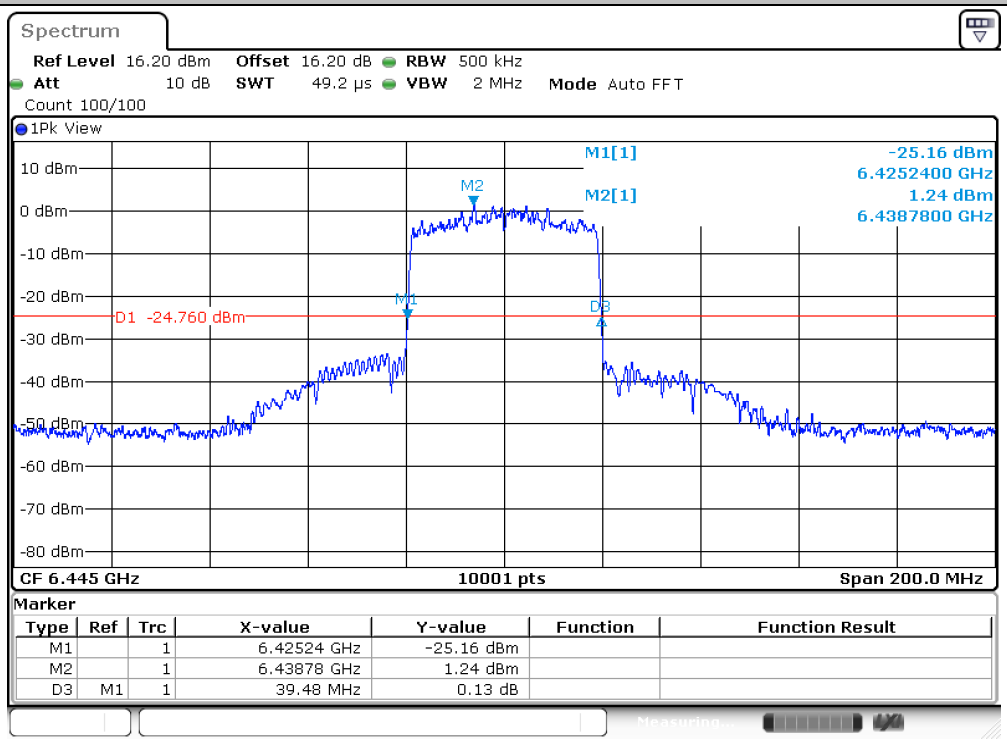

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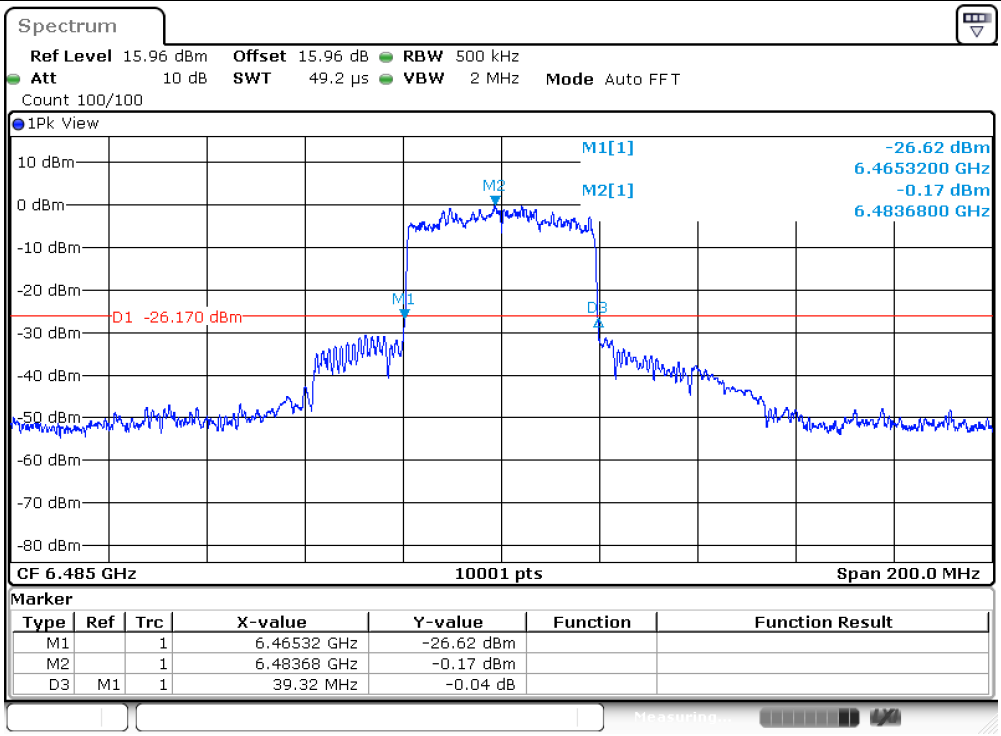

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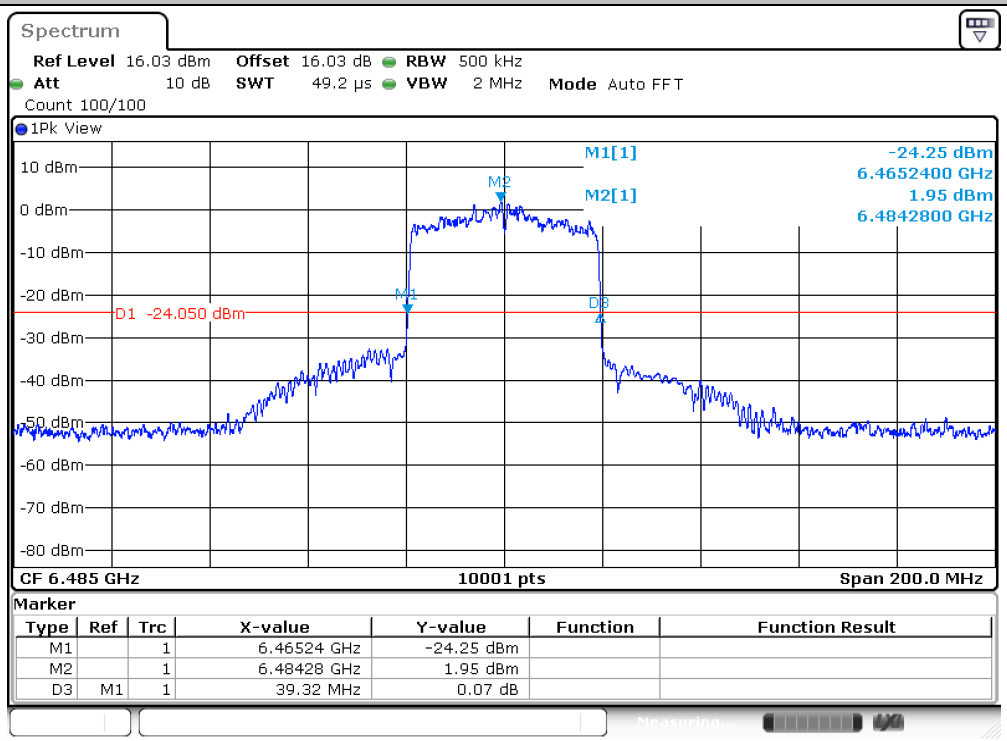

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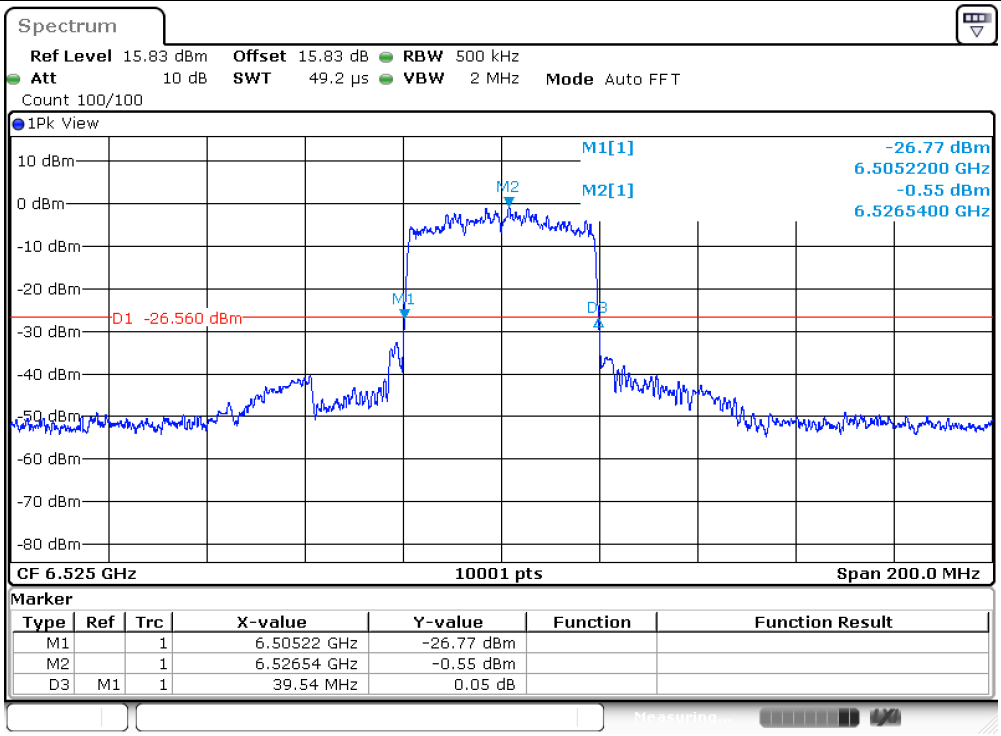

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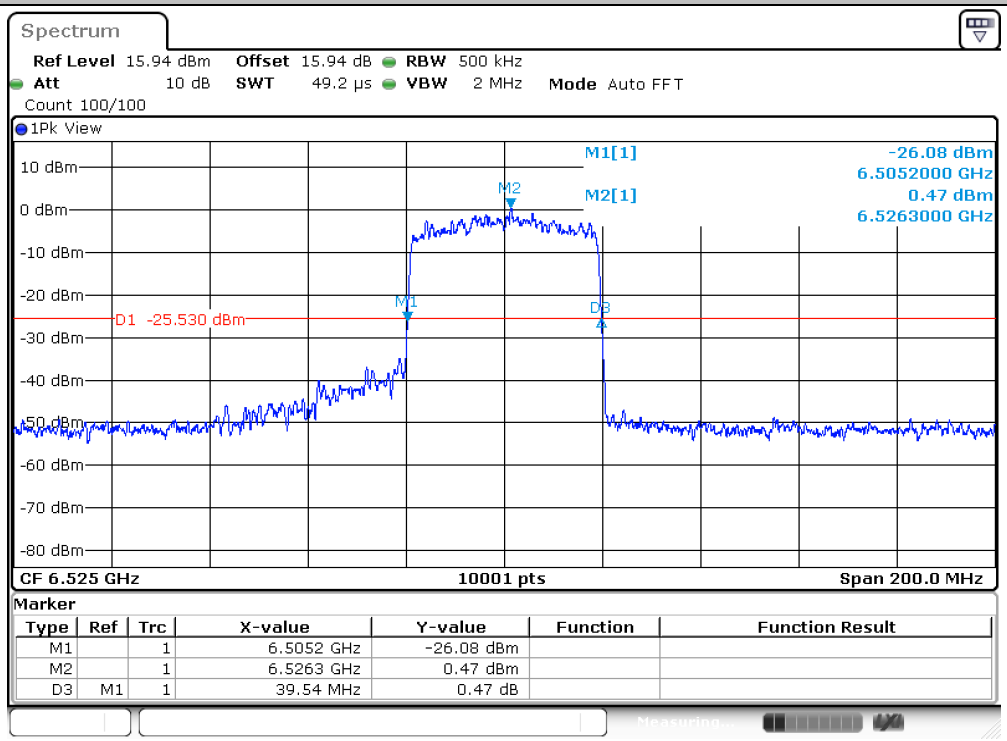

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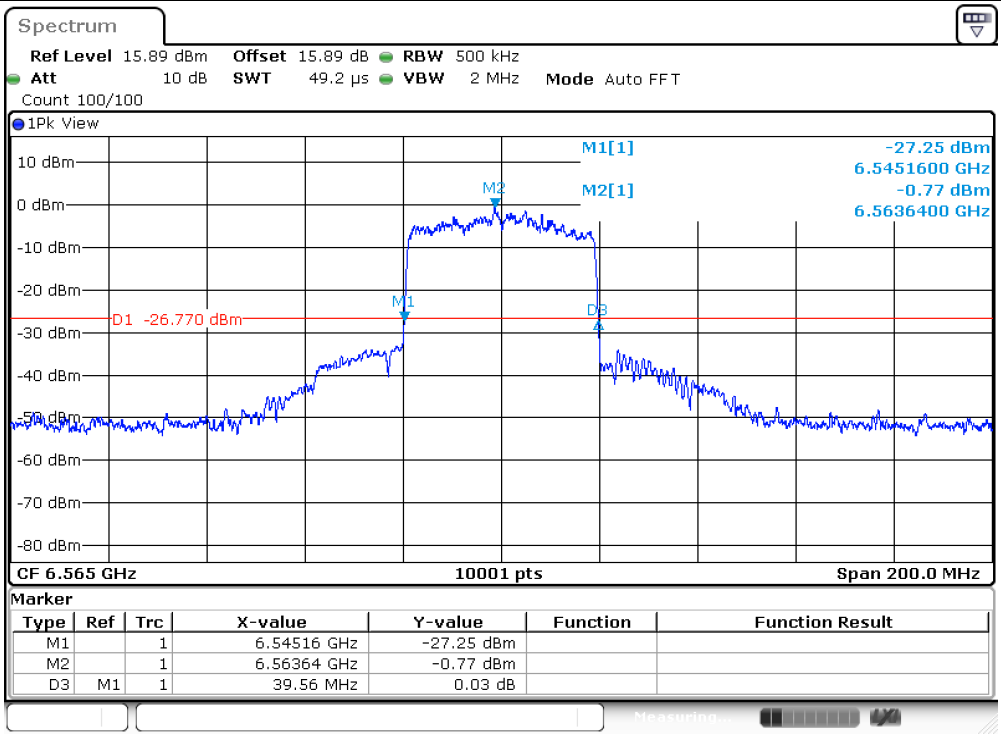

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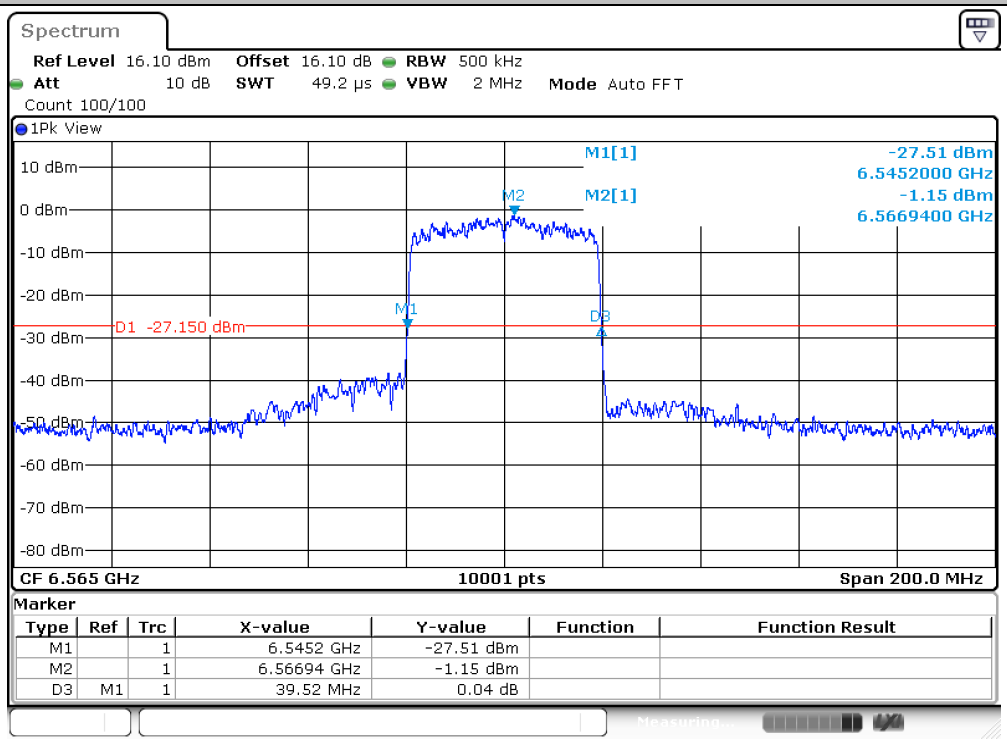

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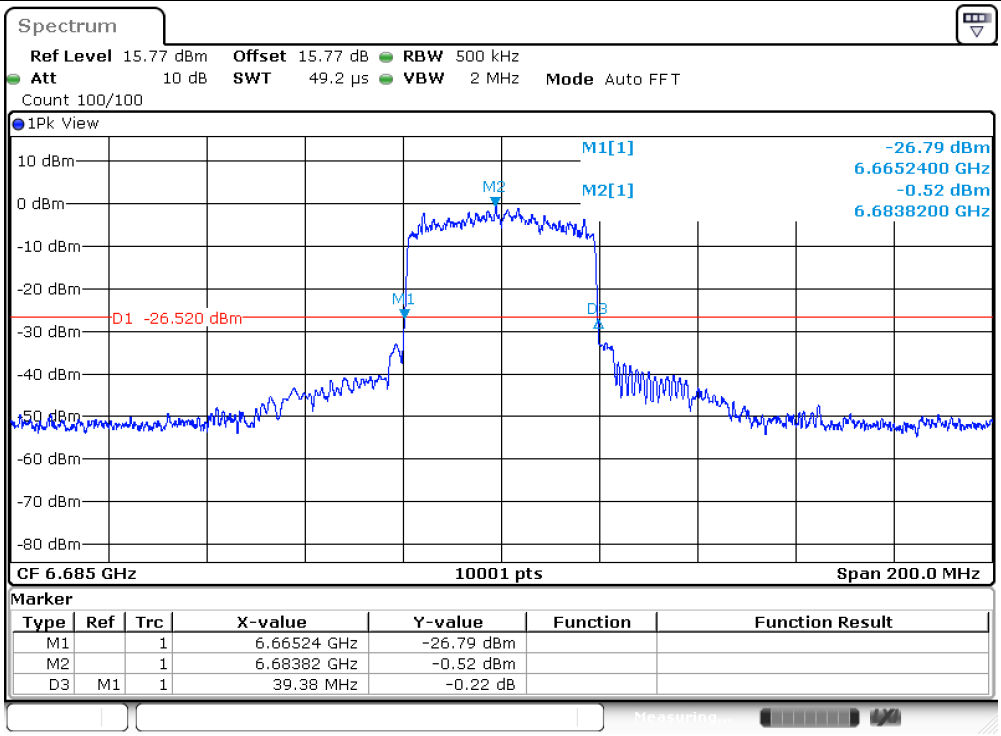

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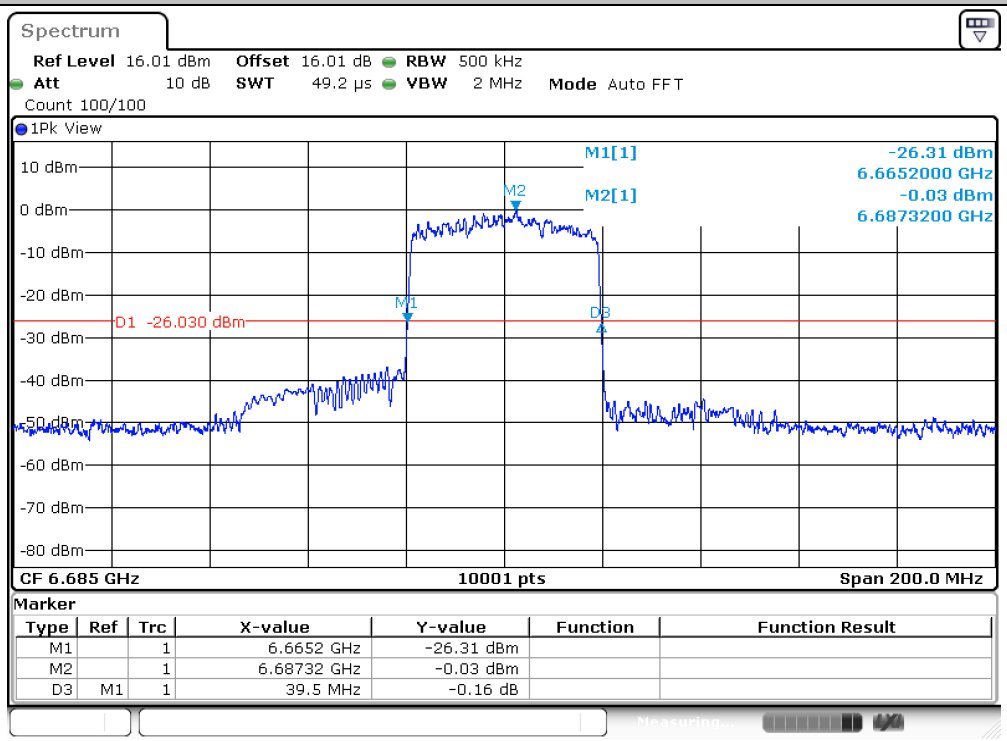

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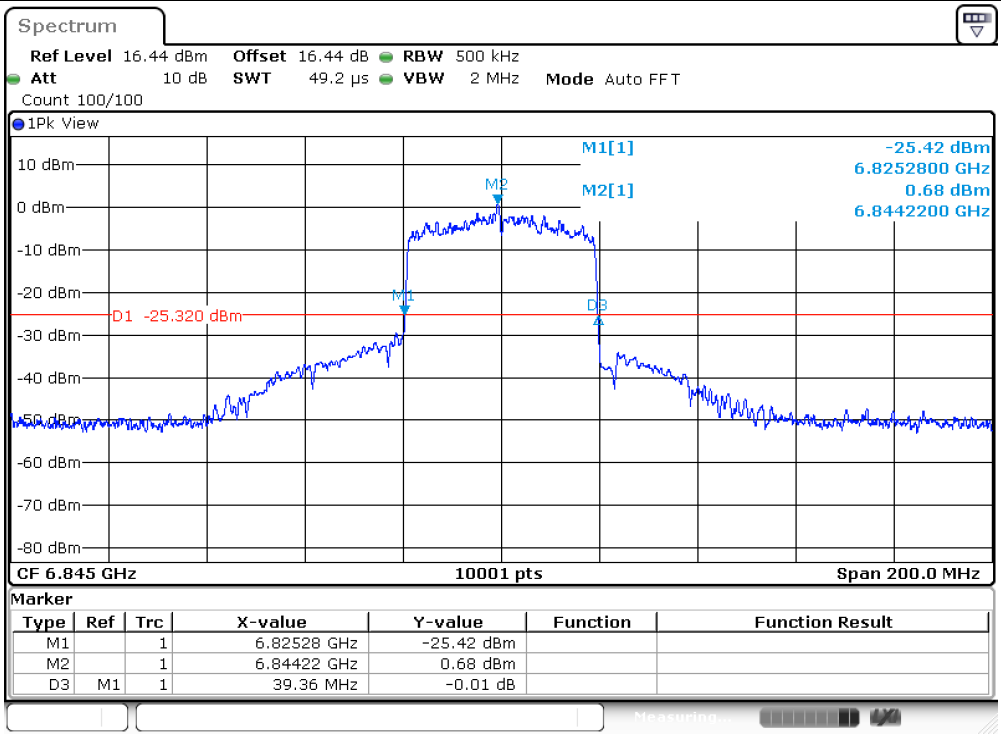

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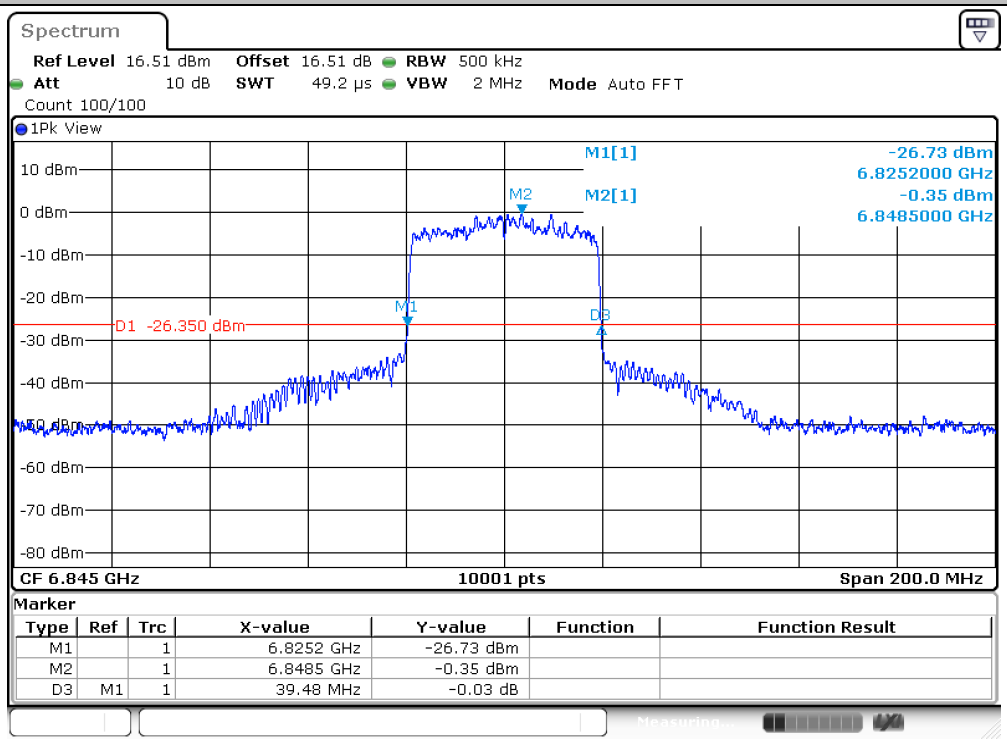

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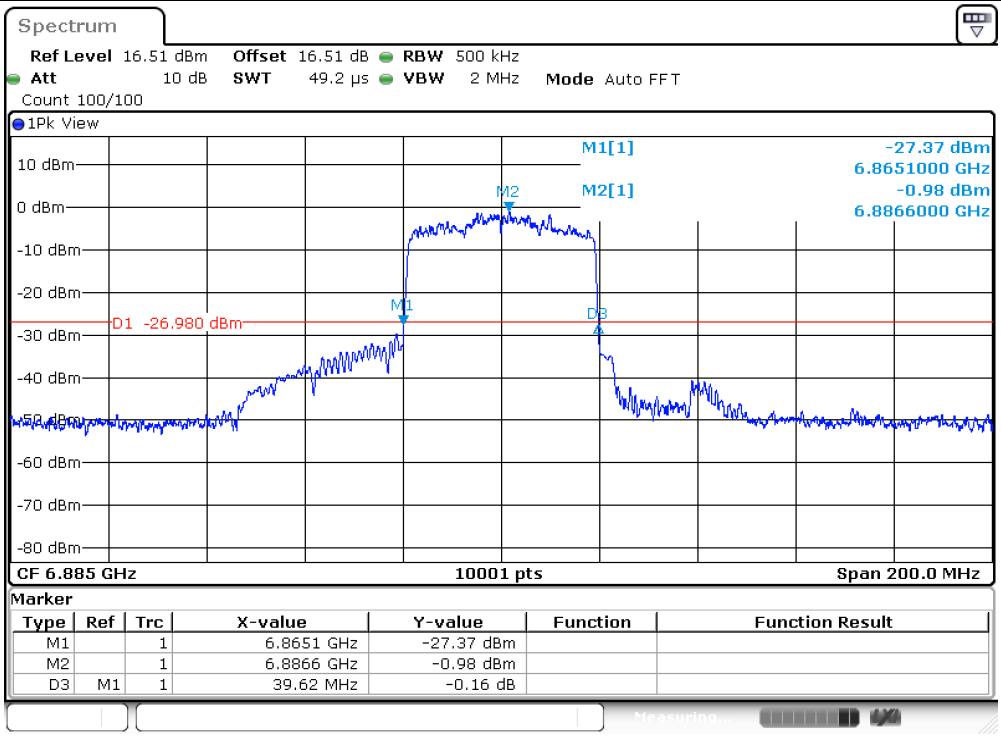

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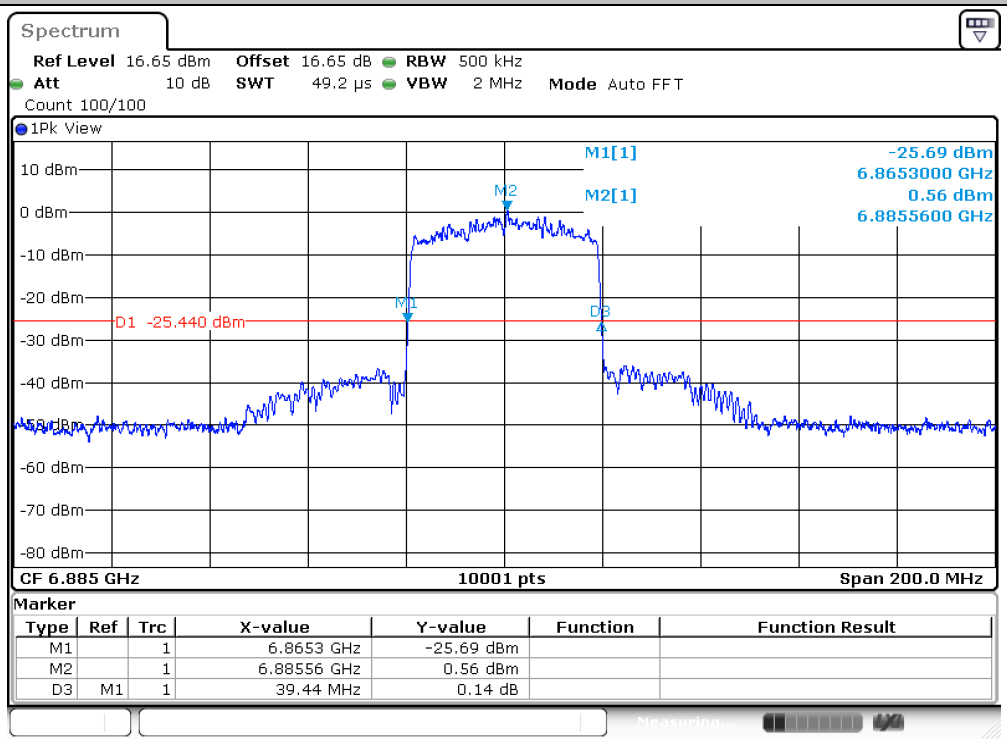

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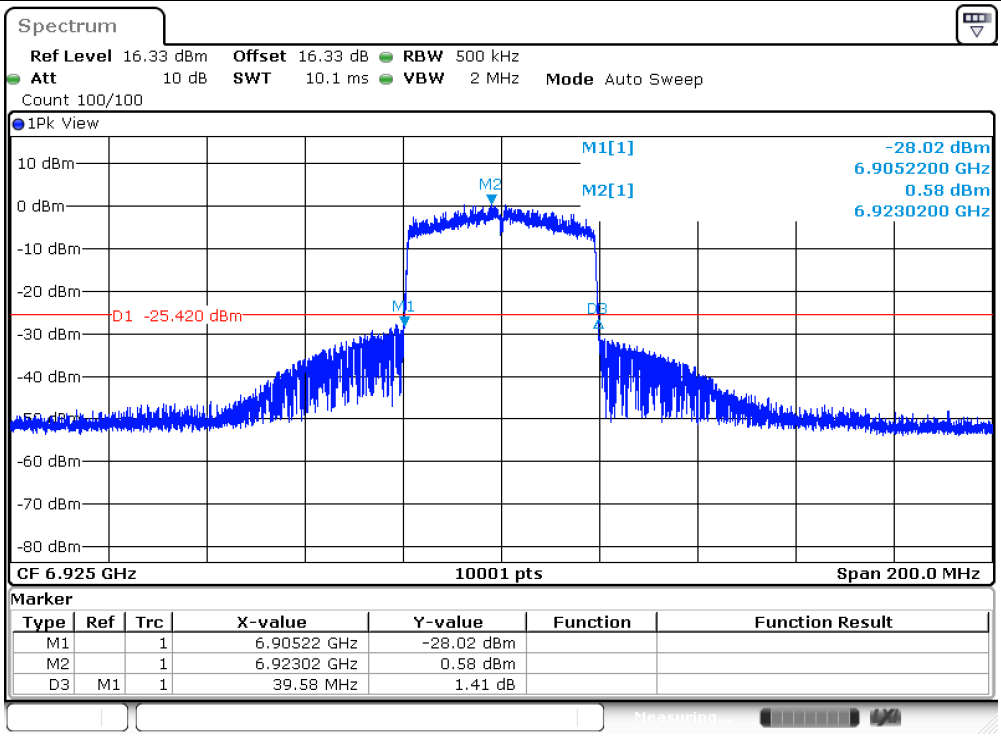

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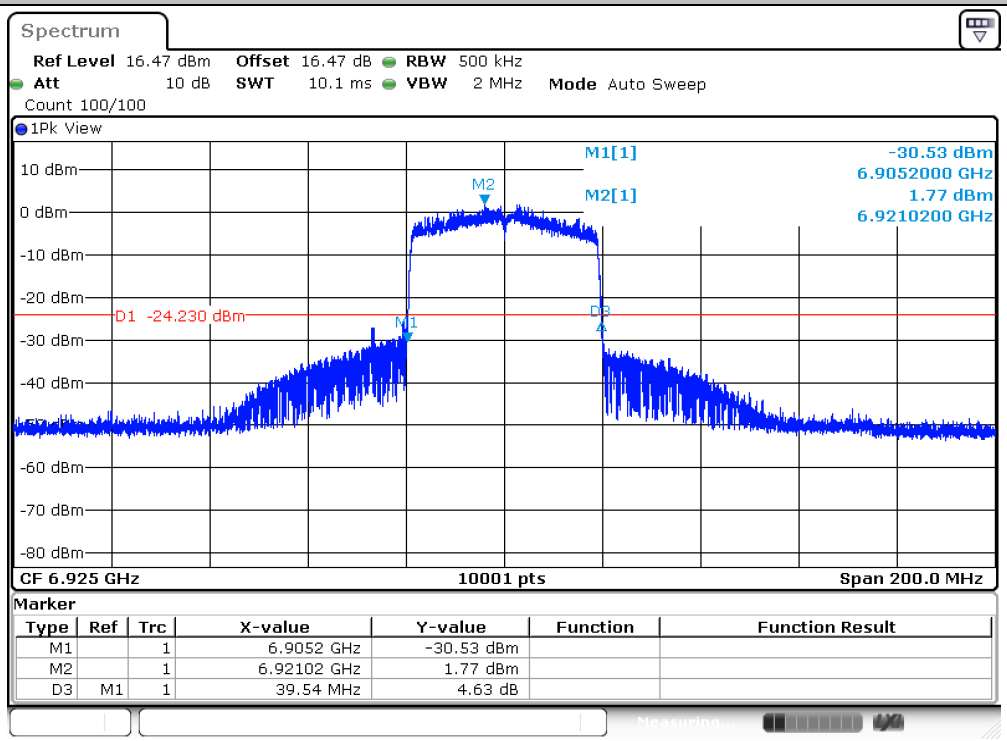

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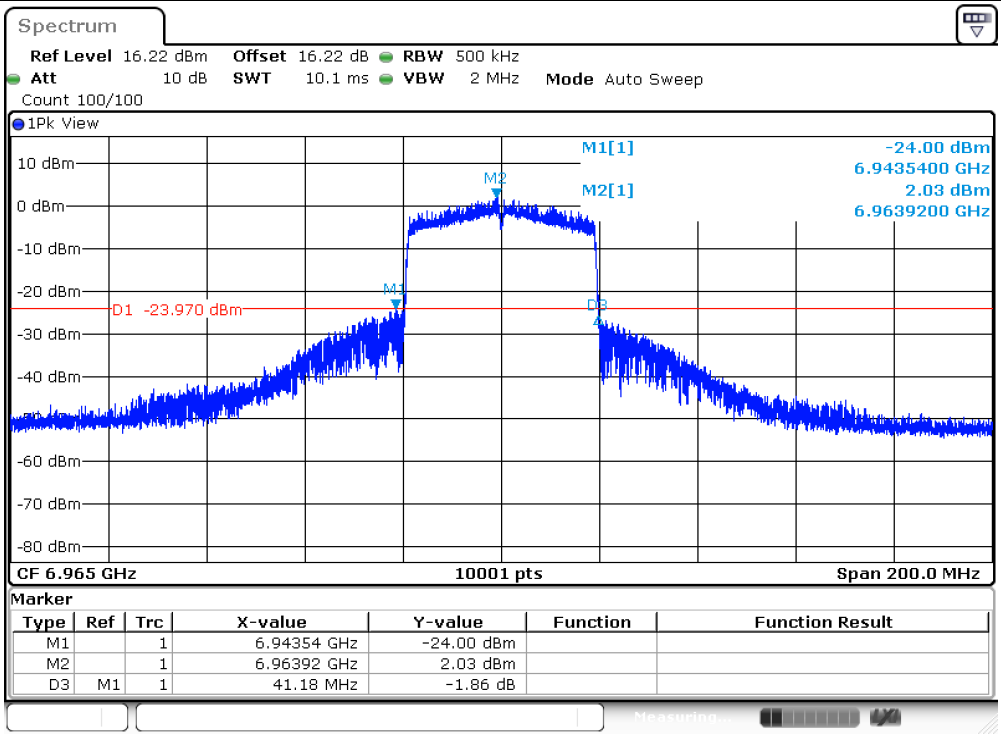

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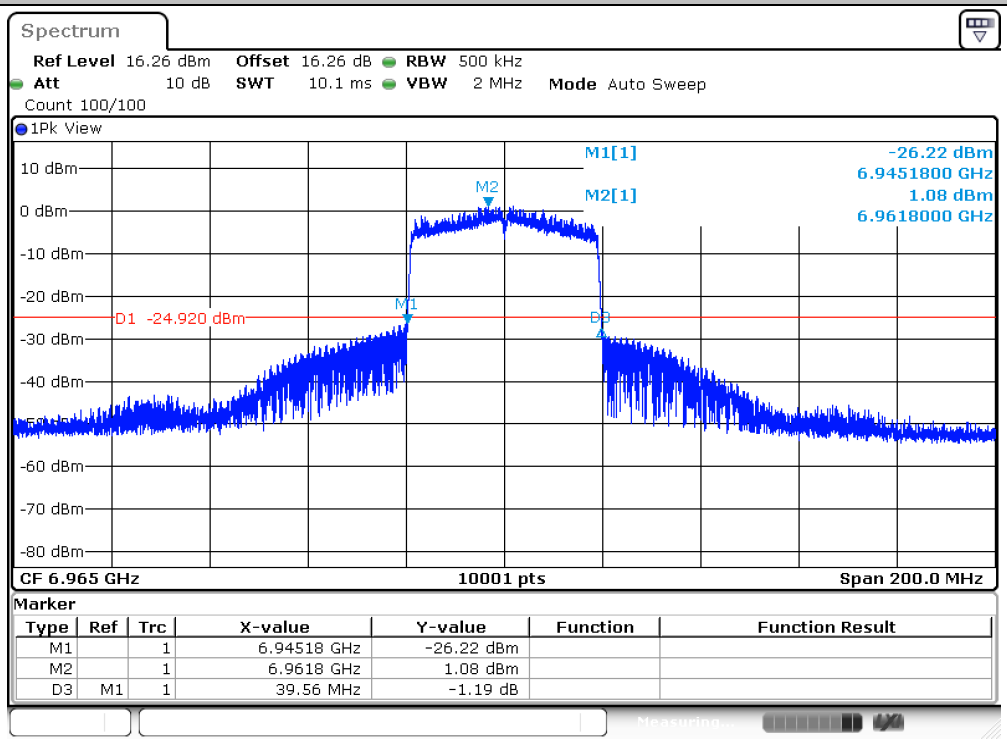

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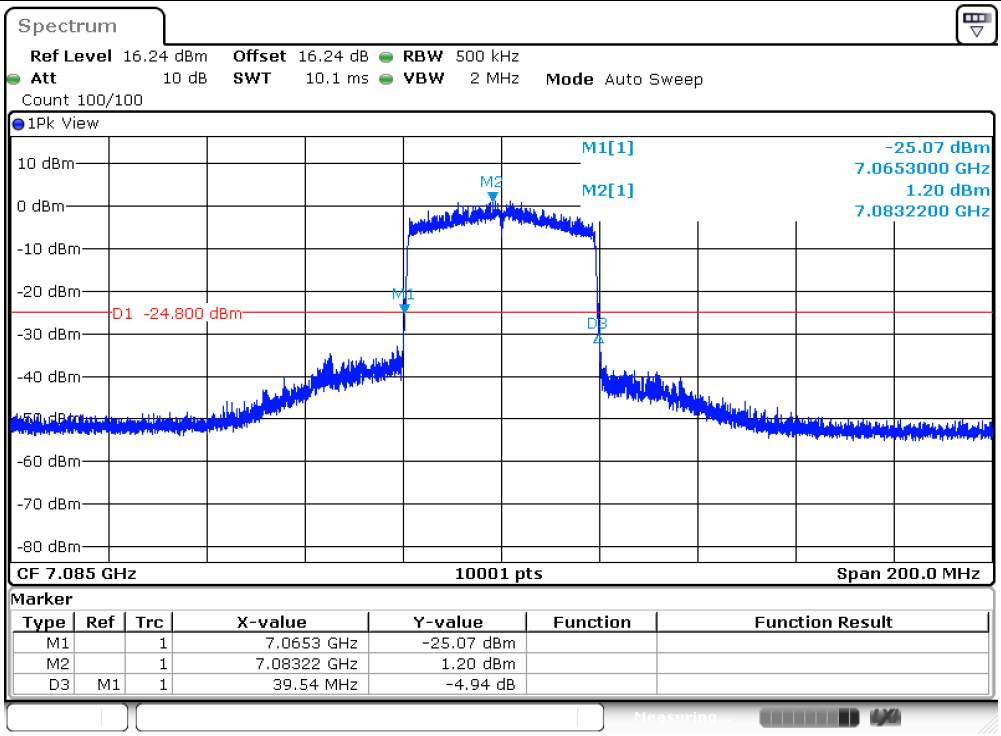

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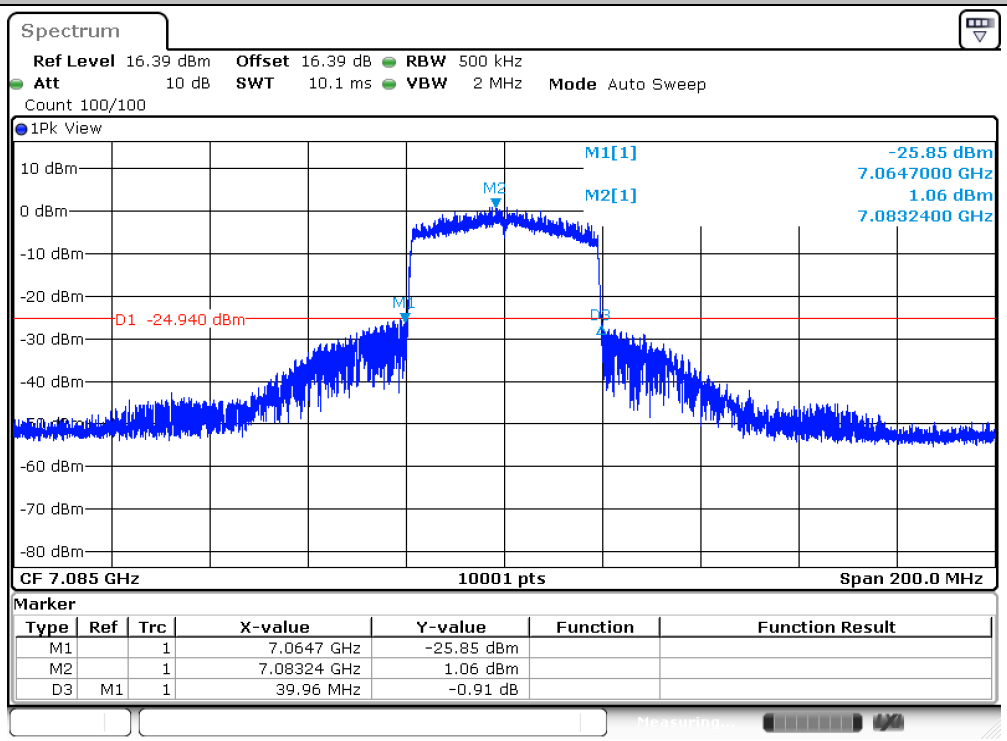

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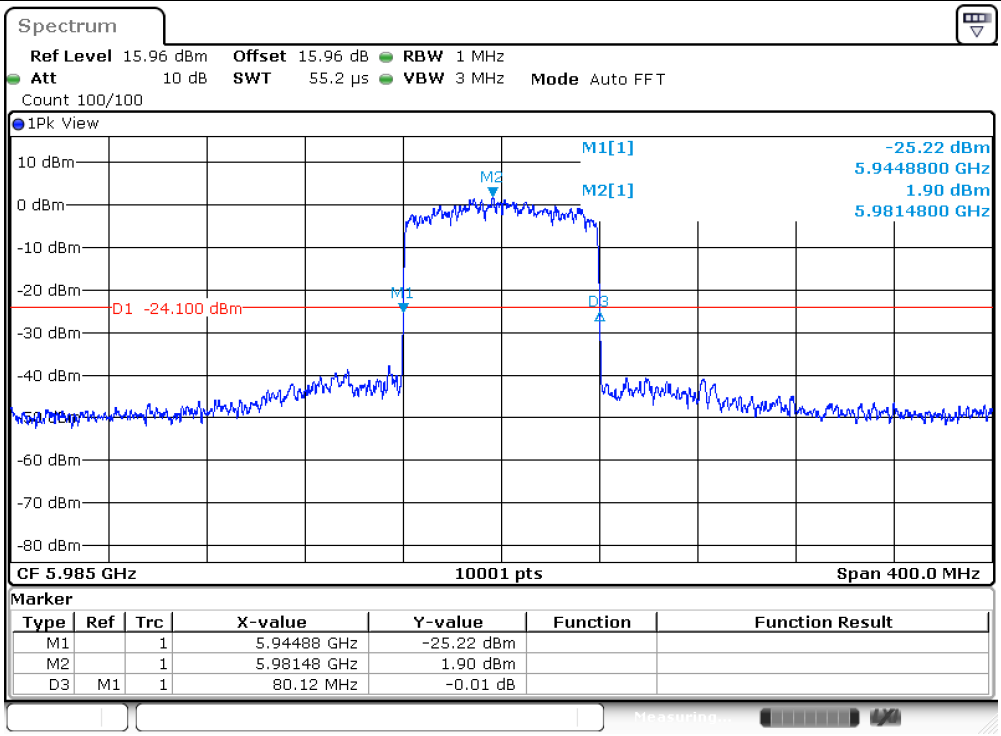

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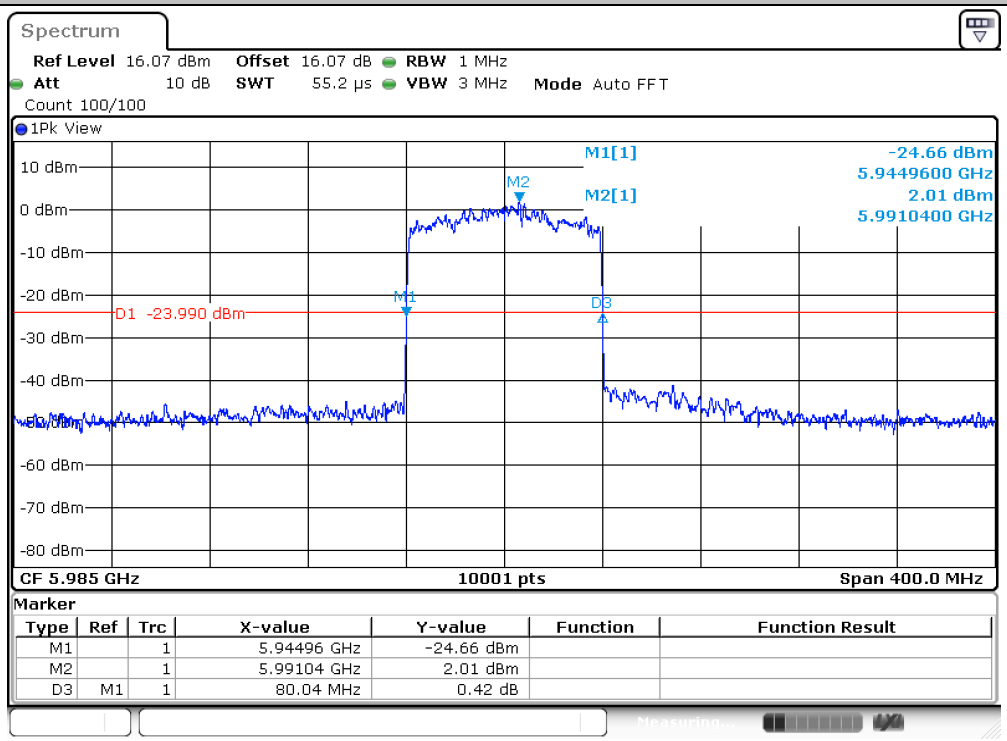

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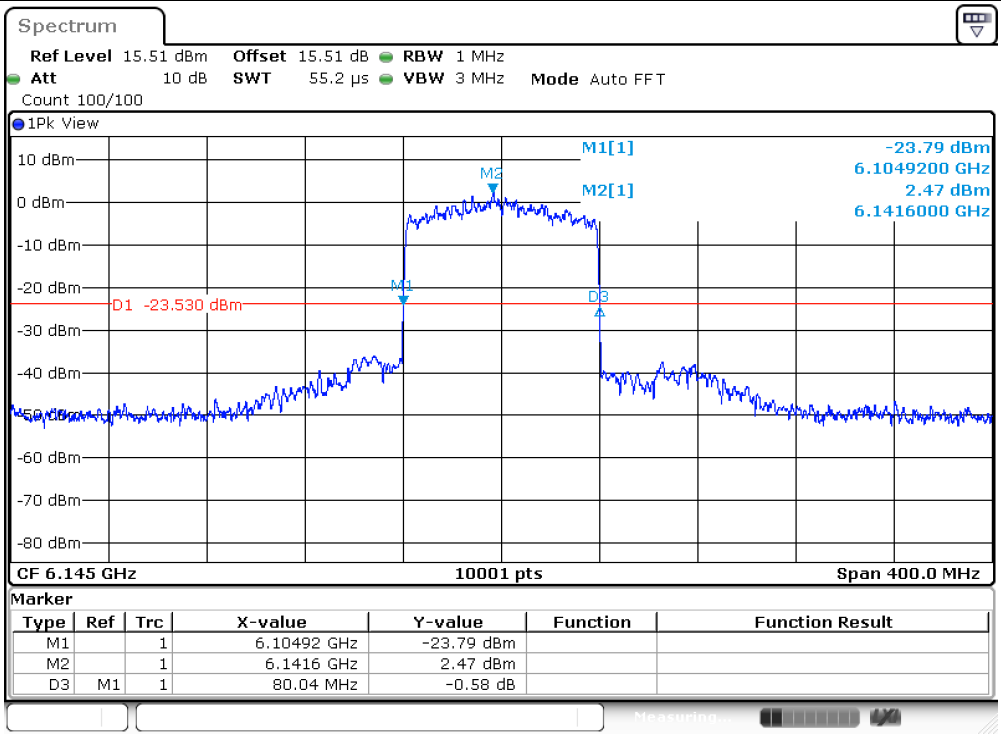

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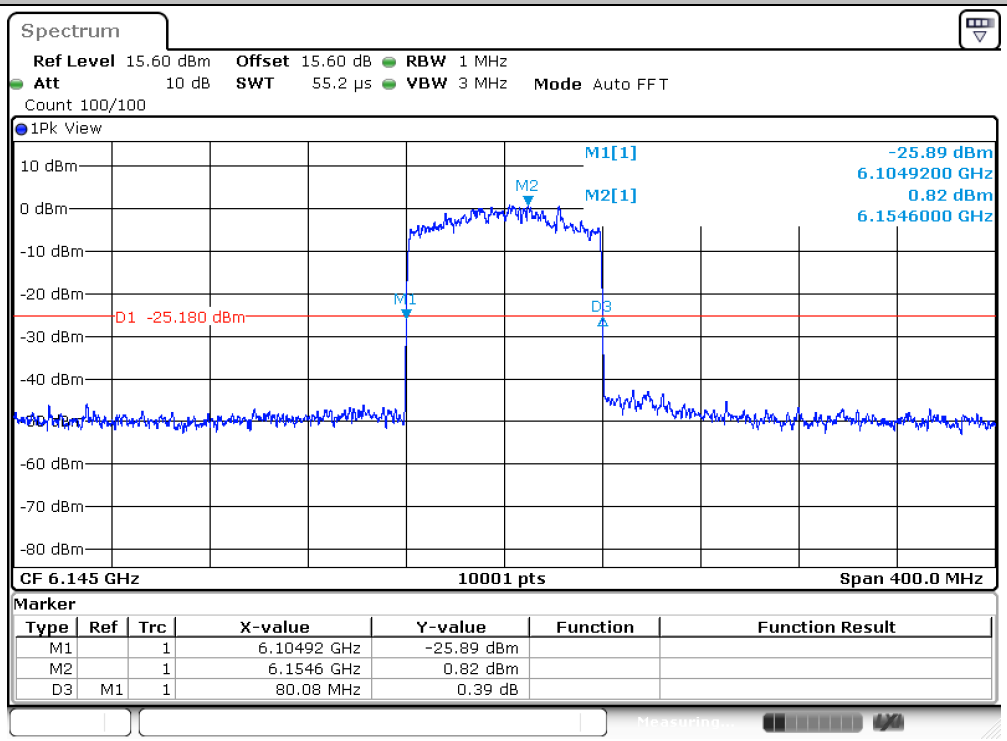

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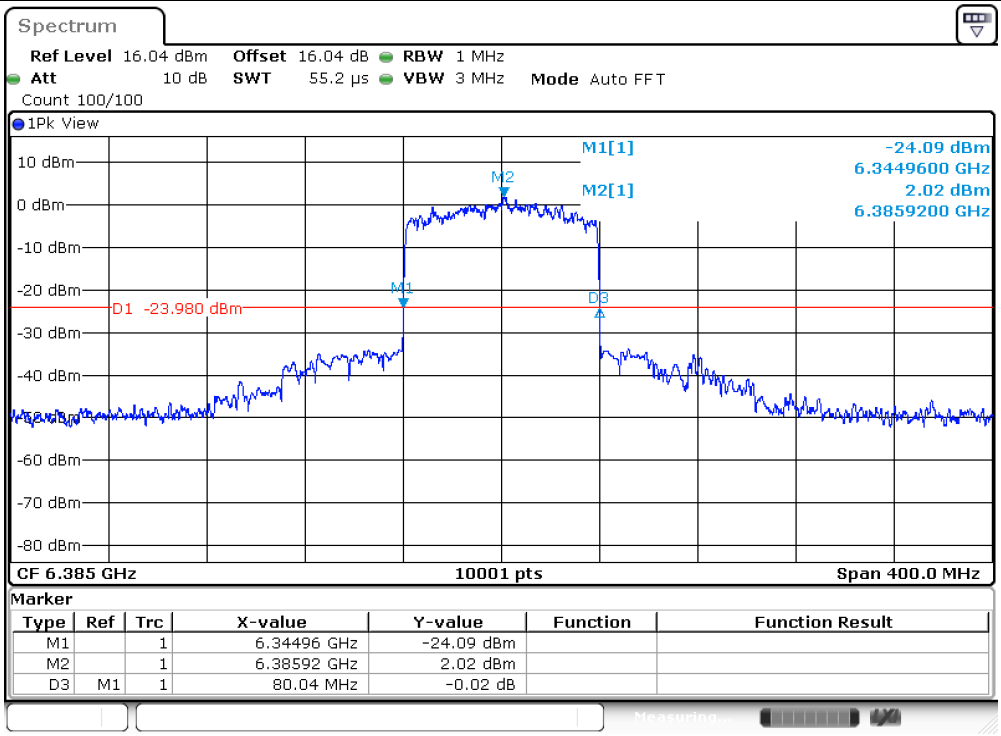

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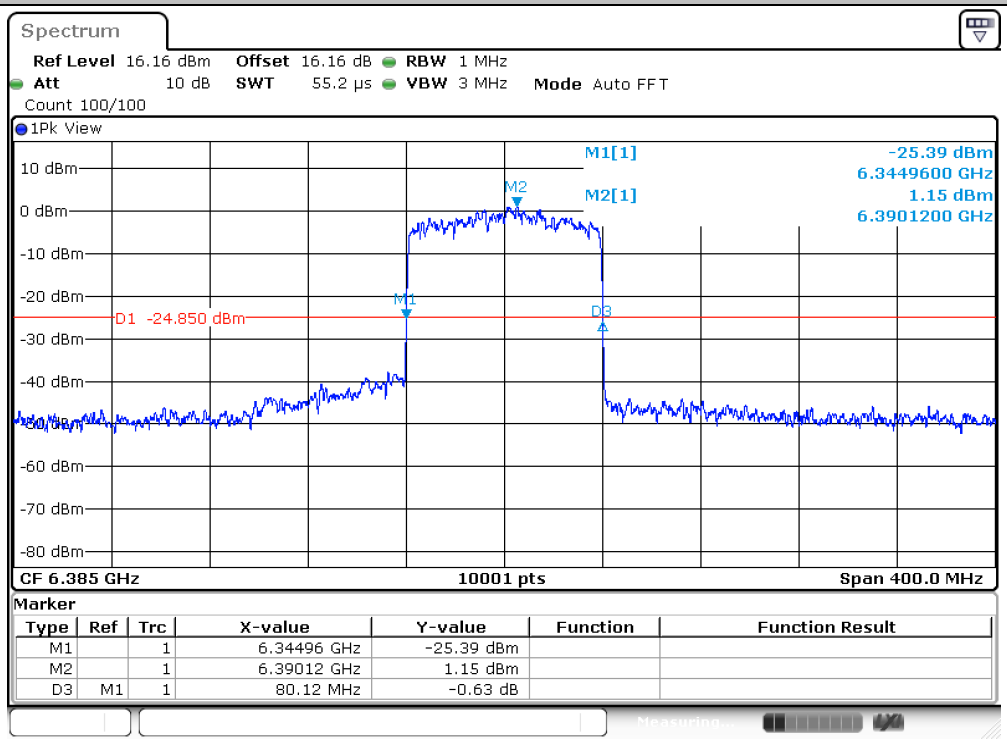

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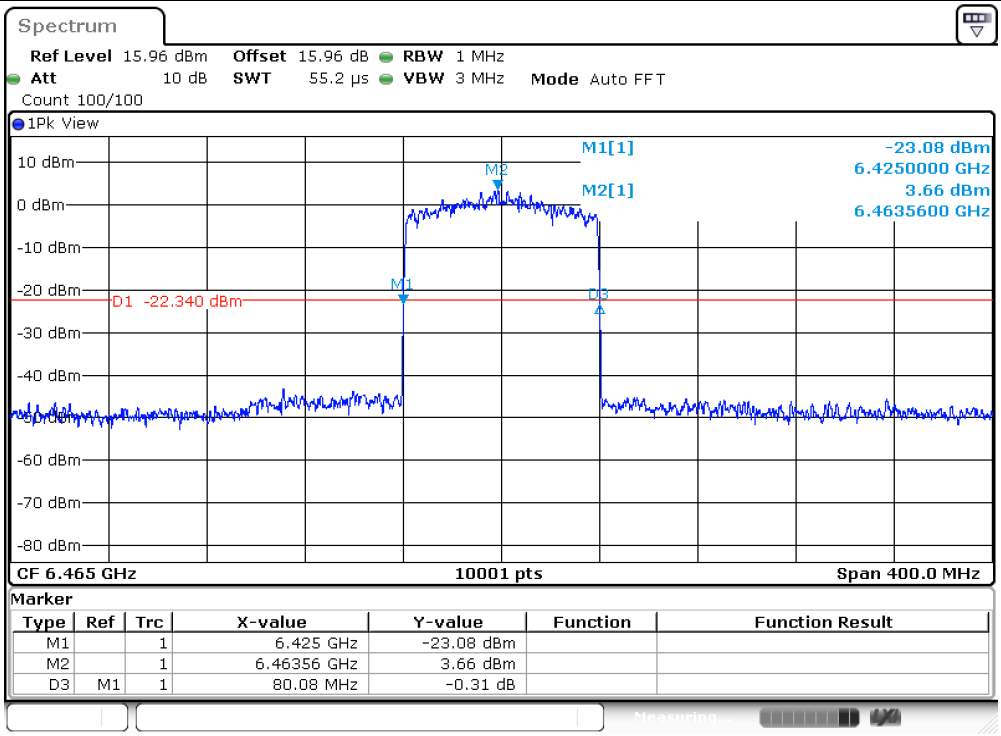

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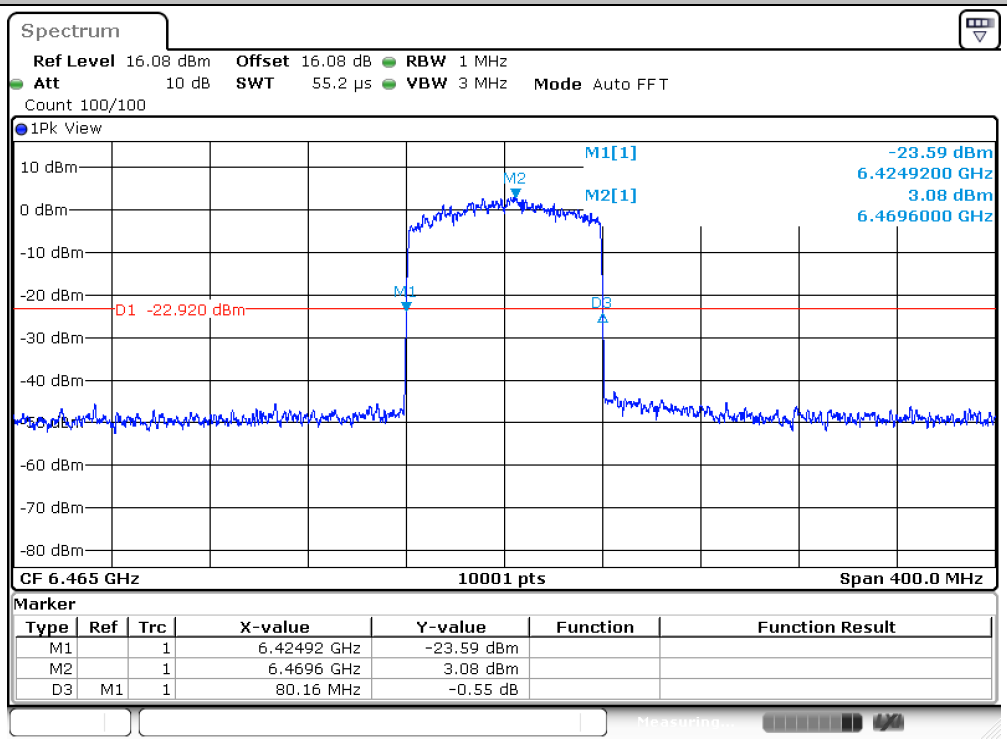

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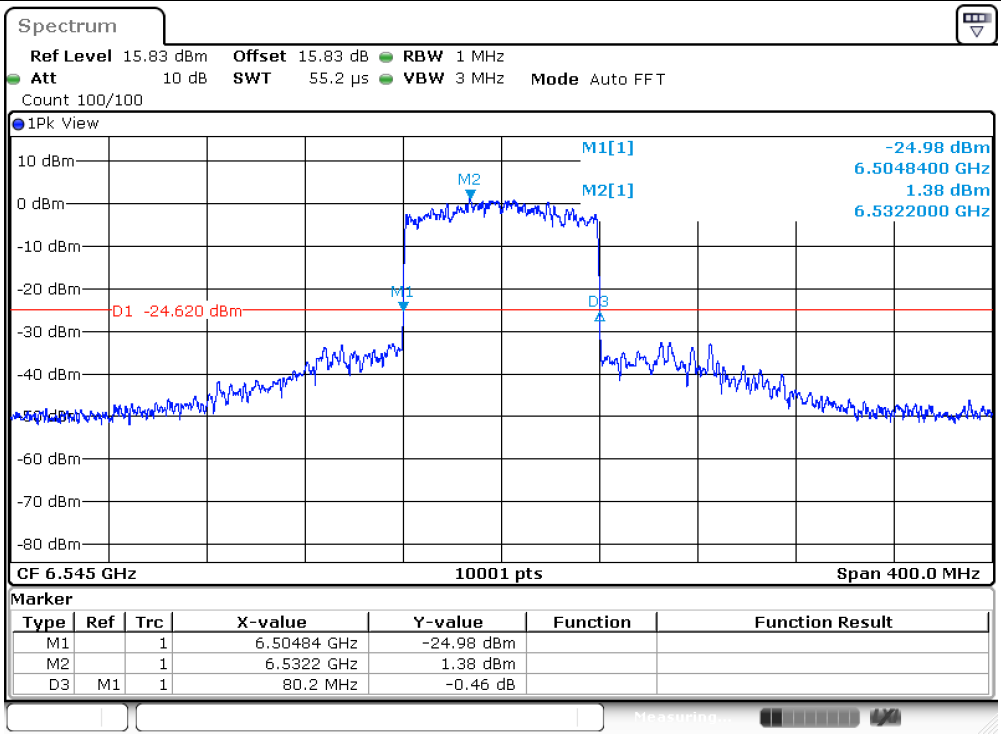

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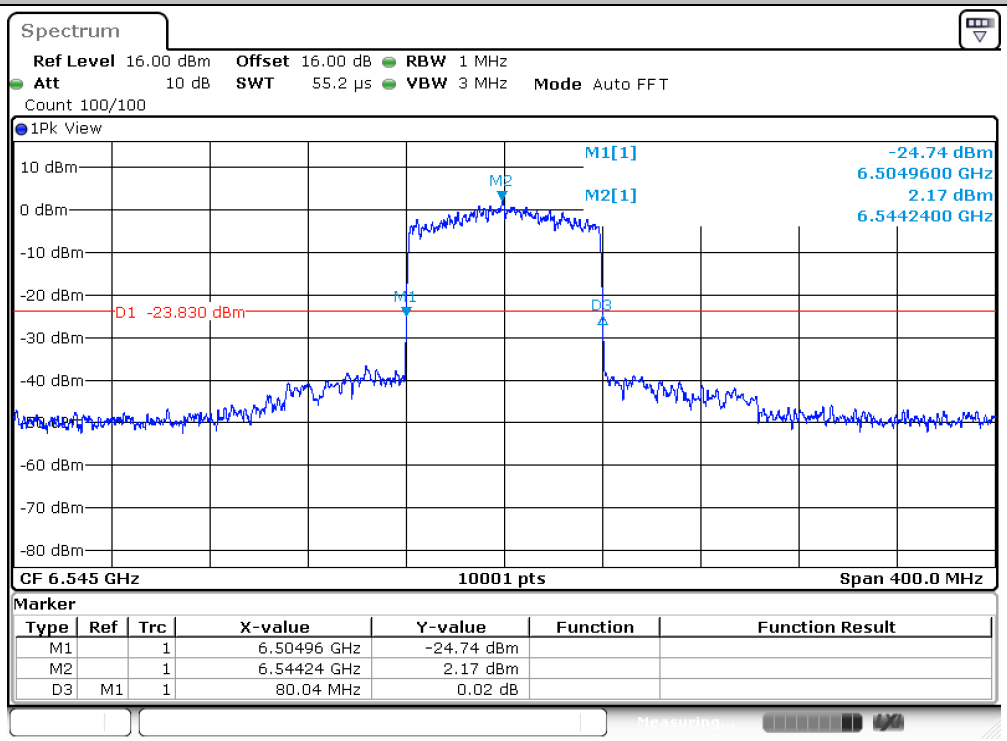

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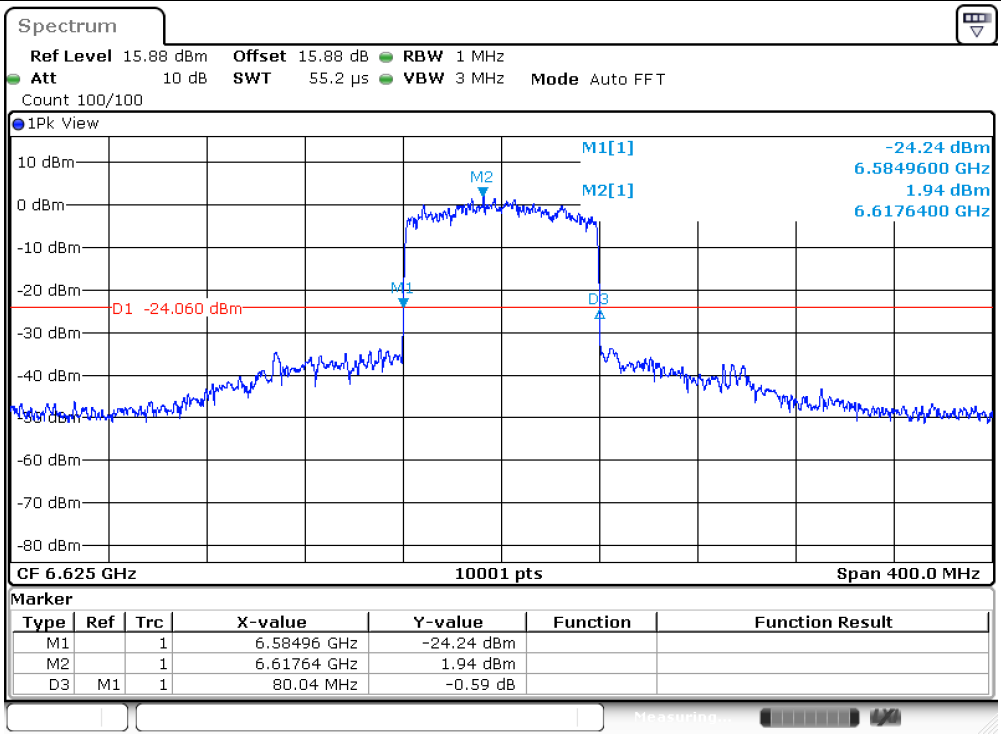

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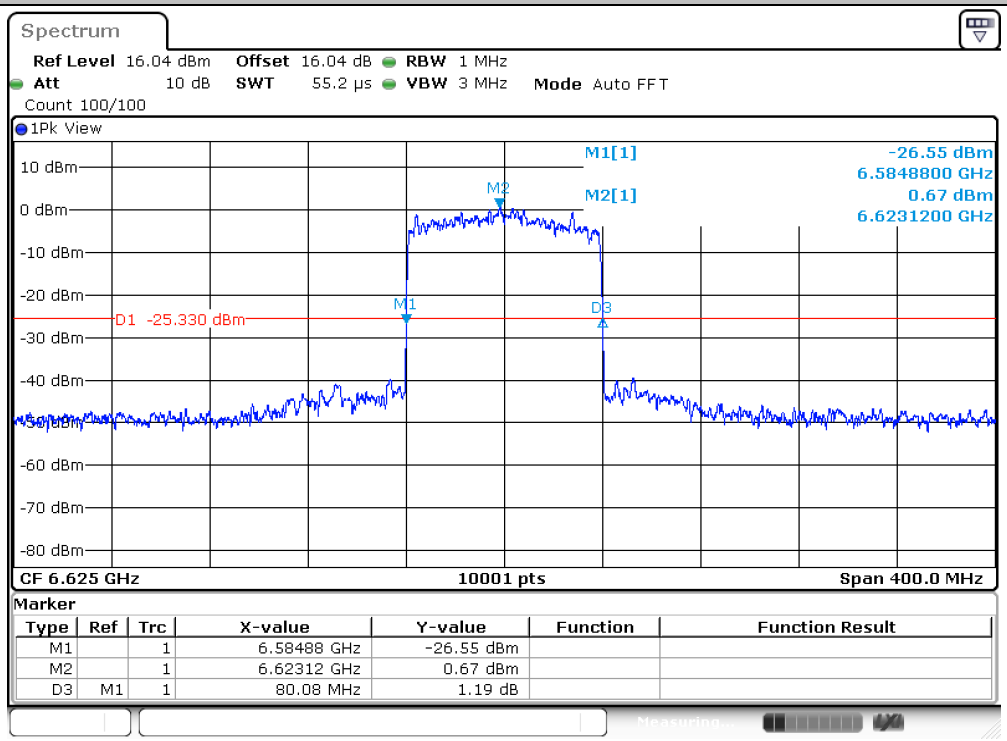

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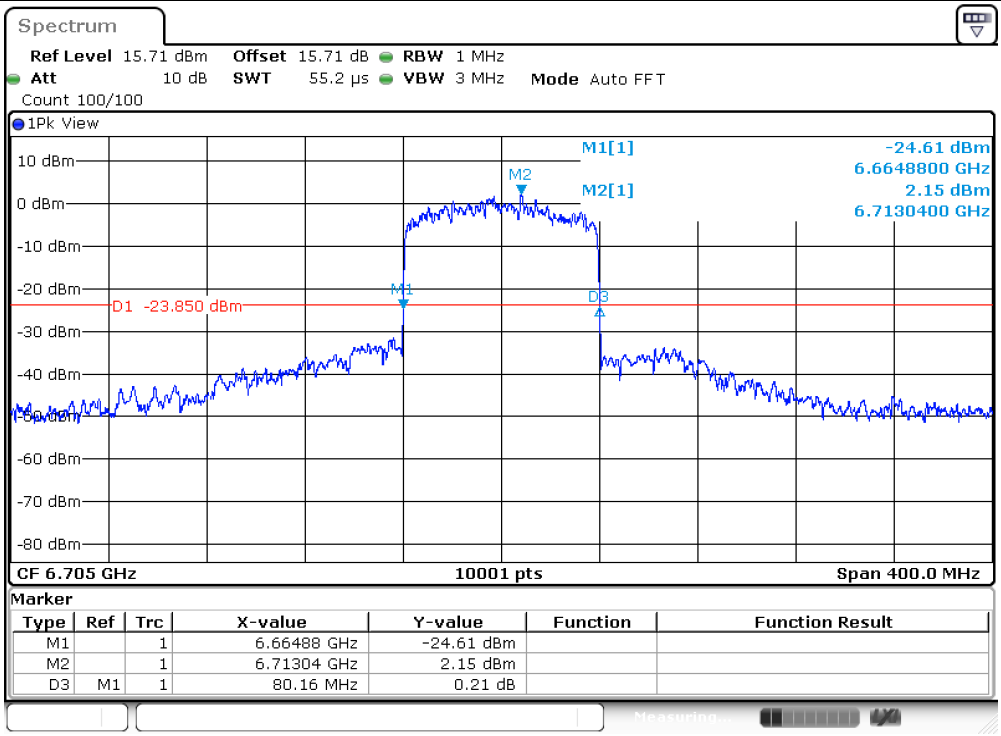

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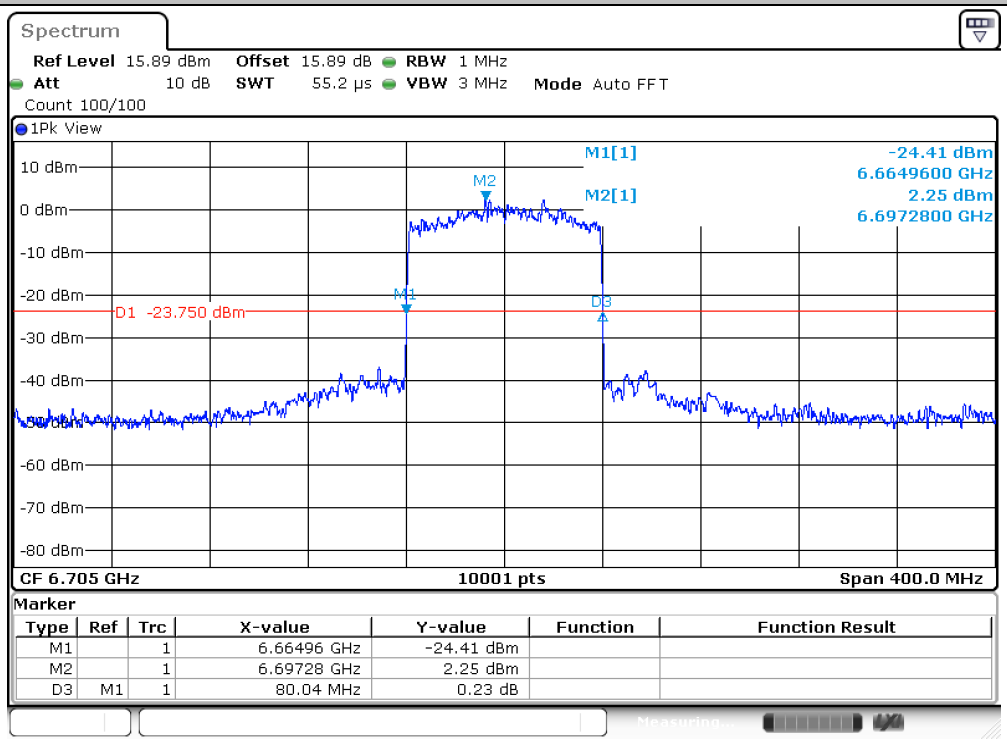

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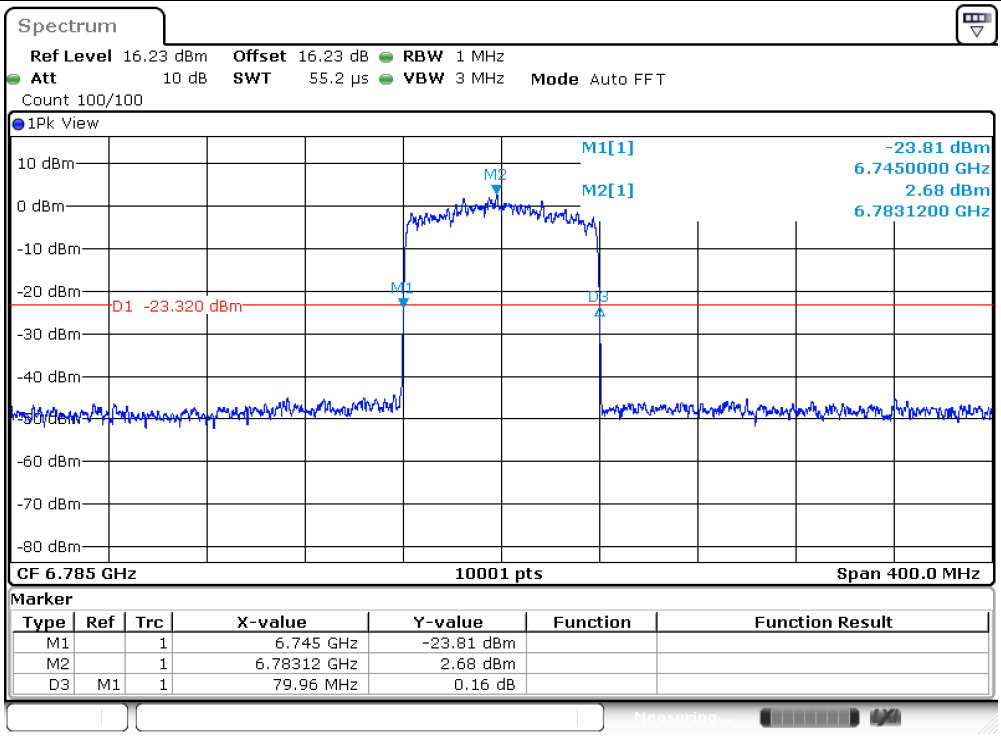
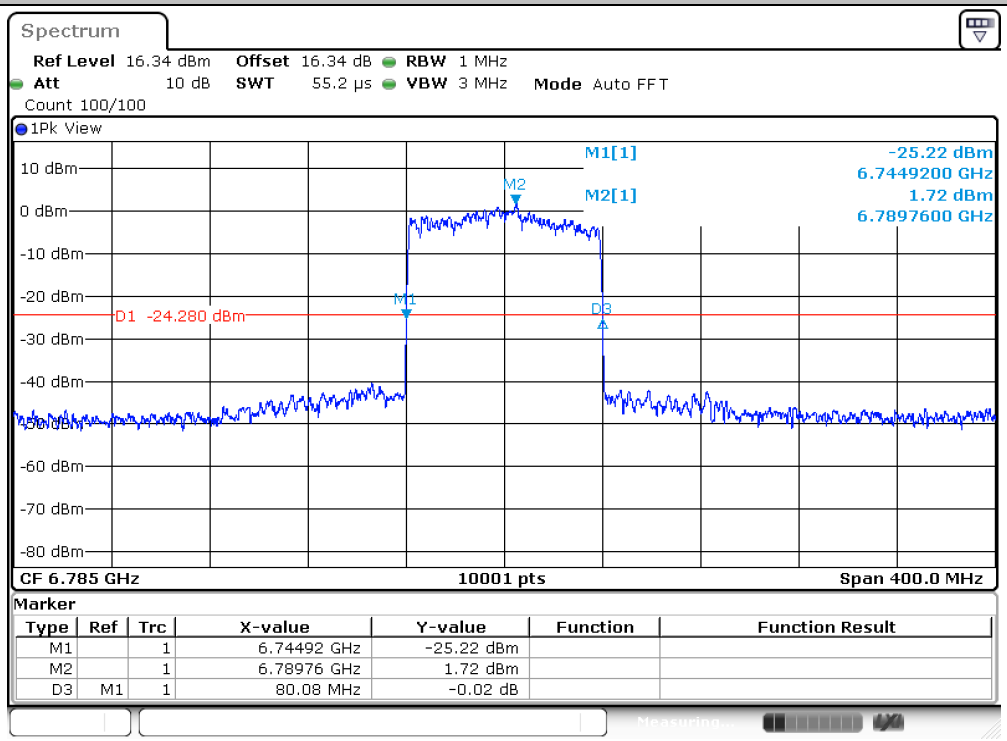
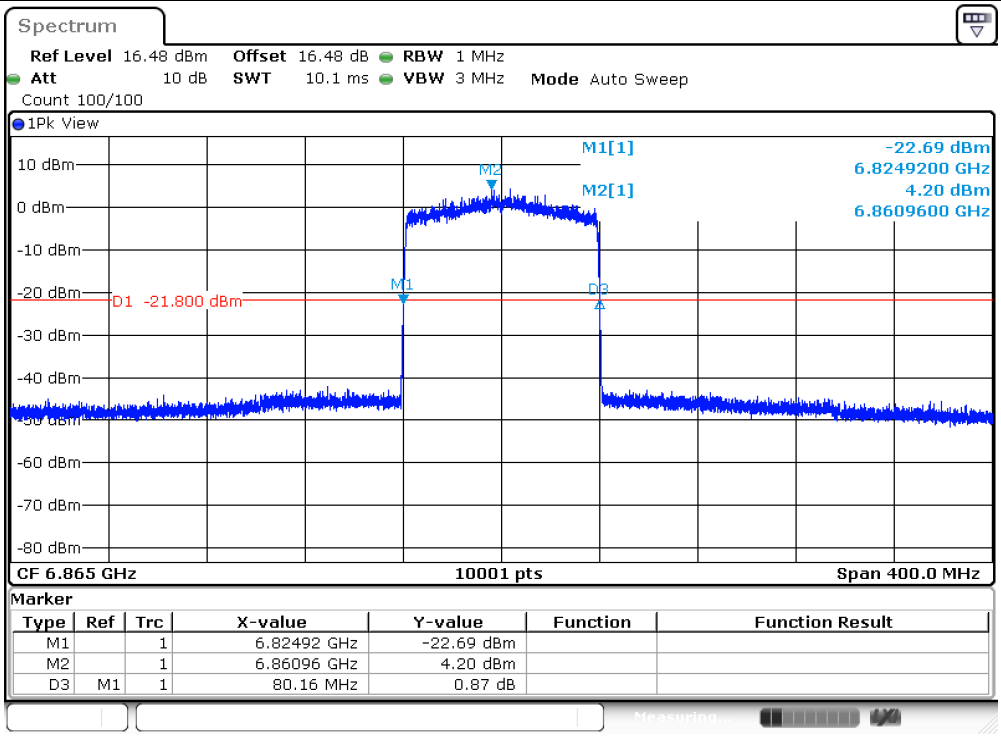
11BE80MIMO_Ant6_6785



11BE80MIMO_Ant17_6785

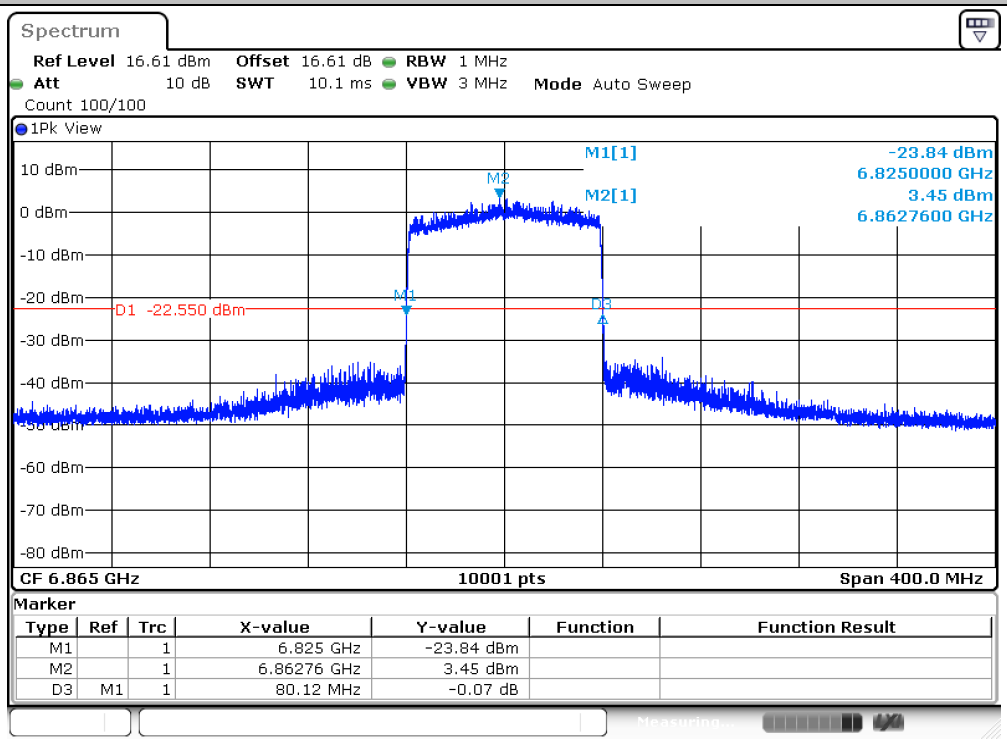


11BE80MIMO_Ant6_6865



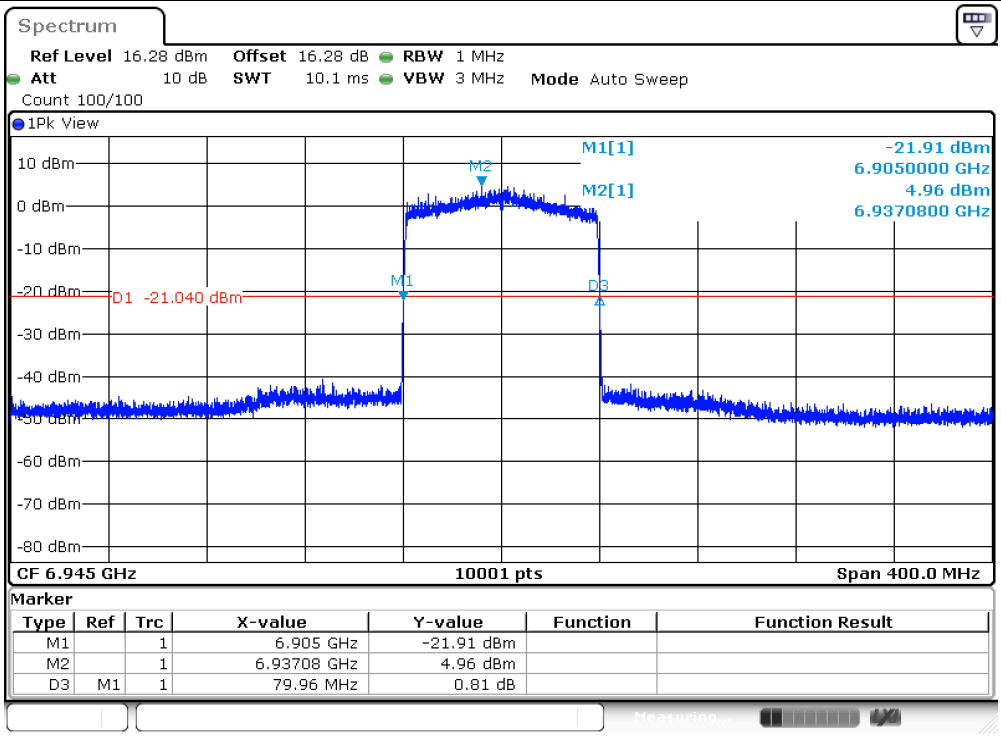
Date: 2.MAY.2025 20:58:50

11BE80MIMO_Ant17_6865



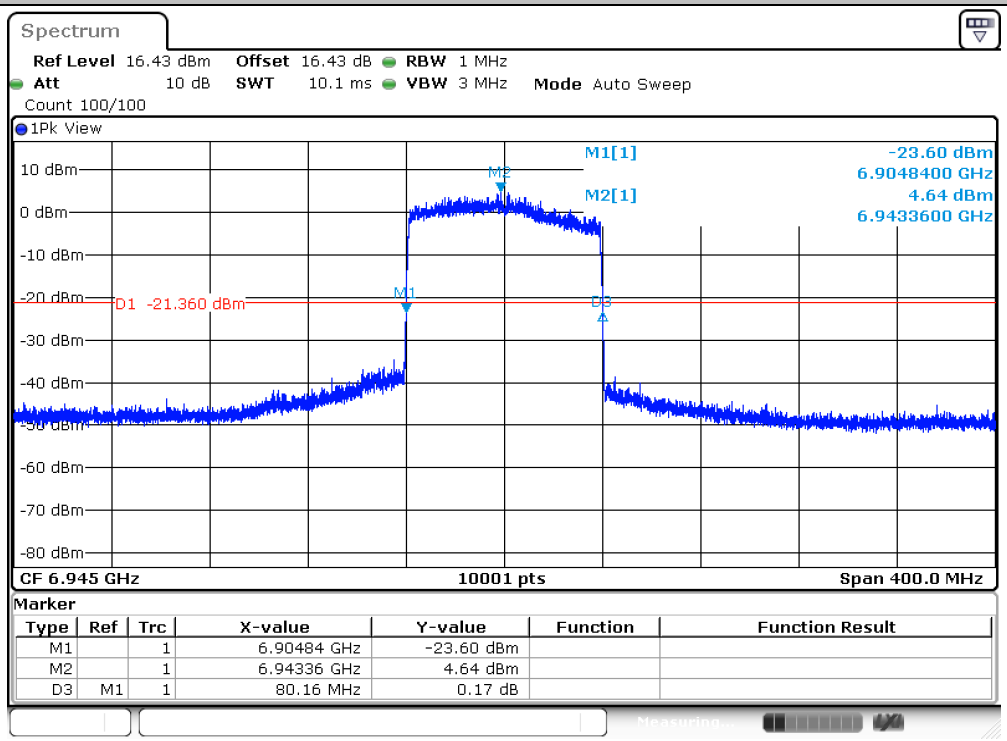
Date: 2.MAY.2025 21:00:07

11BE80MIMO_Ant6_6945



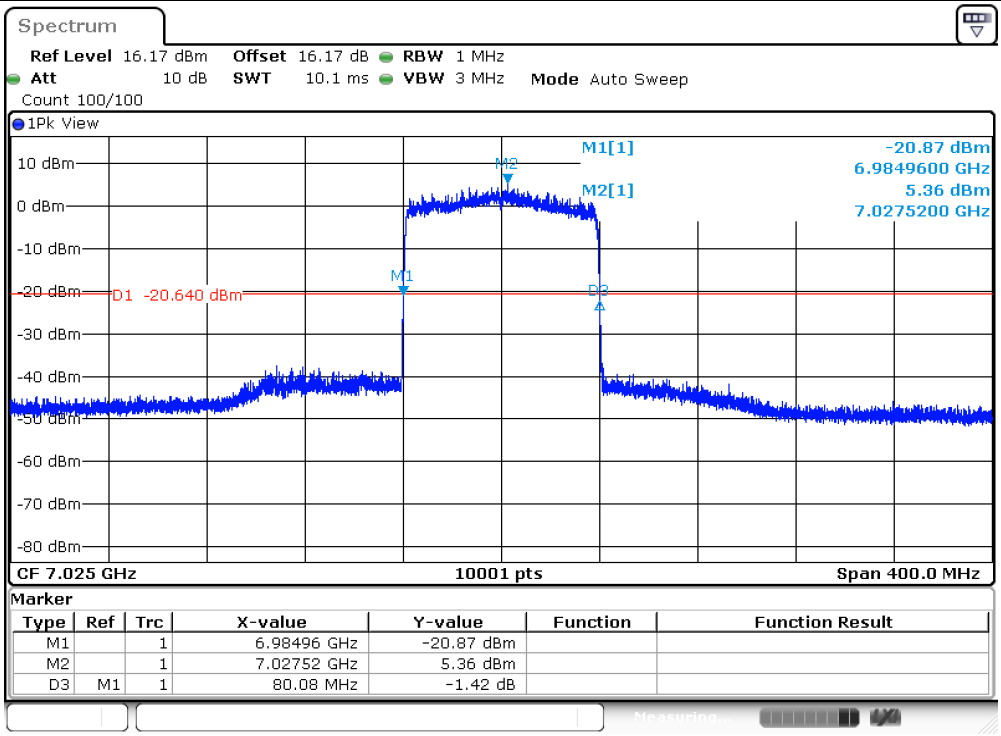
Date: 2.MAY.2025 21:05:27

11BE80MIMO_Ant17_6945



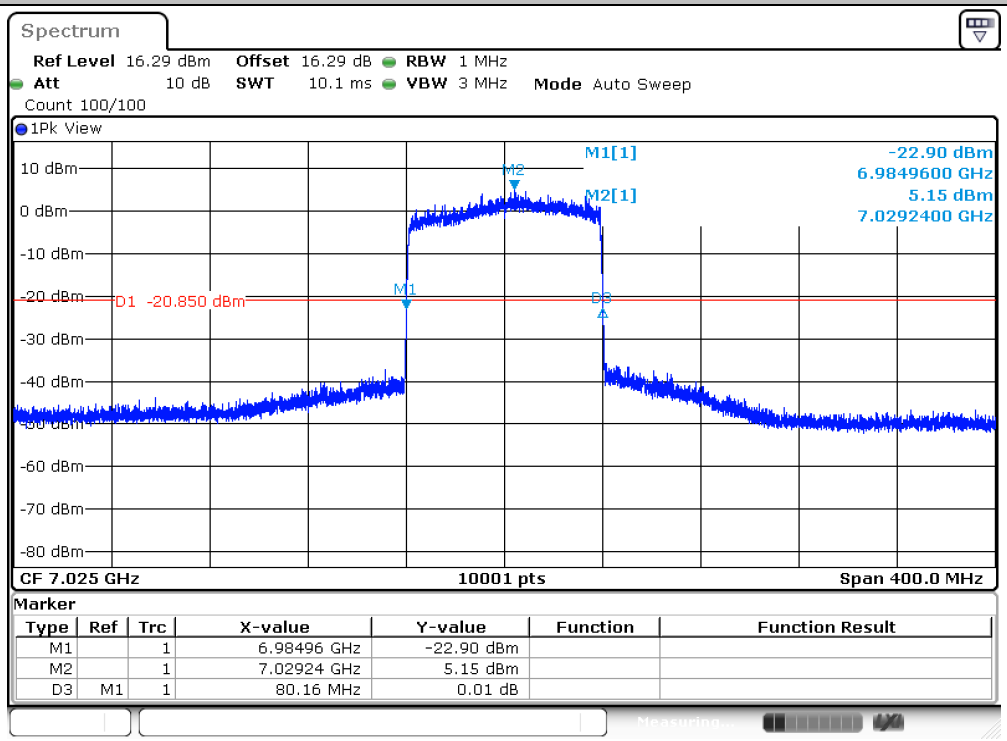
Date: 2.MAY.2025 21:06:54

11BE80MIMO_Ant6_7025



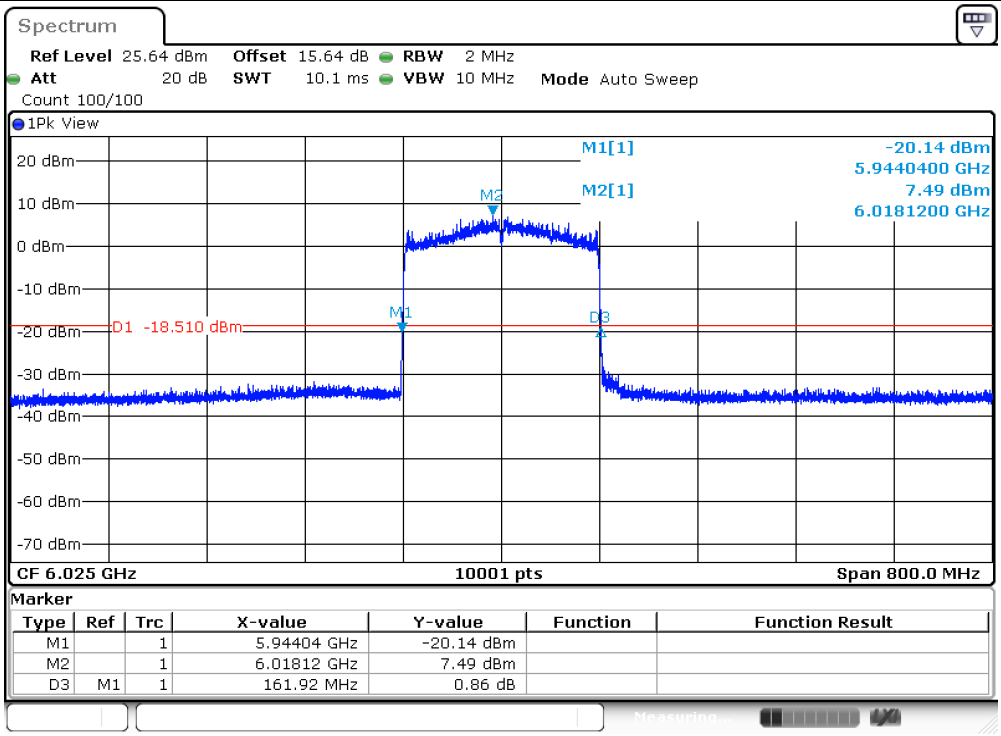
Date: 2.MAY.2025 21:11:50

11BE80MIMO_Ant17_7025



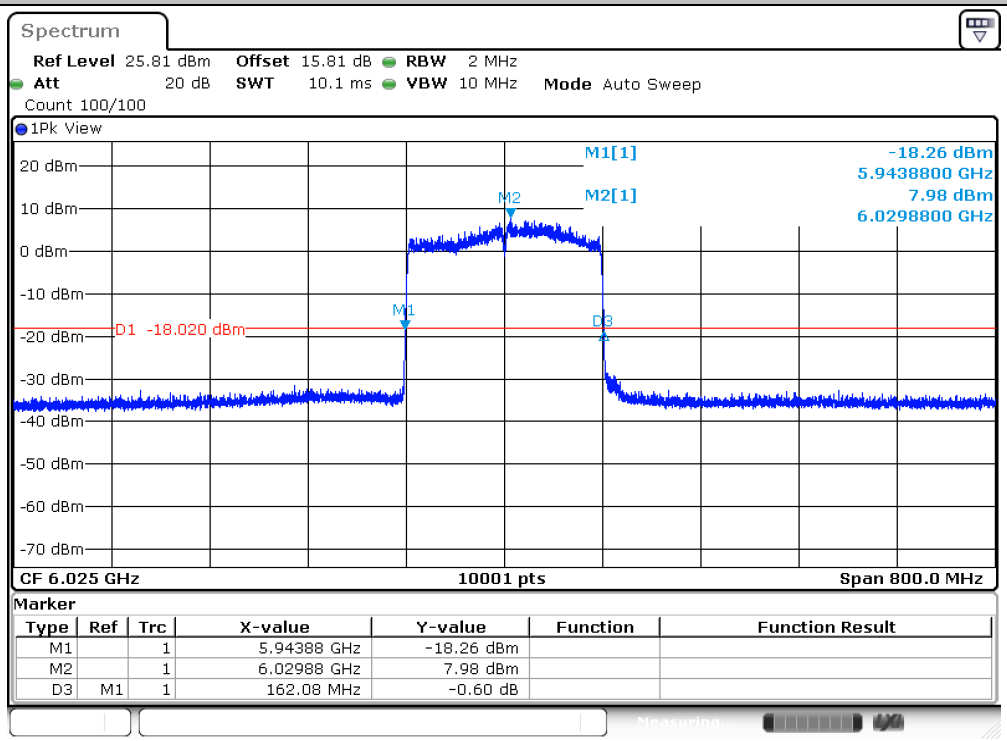
Date: 2.MAY.2025 21:13:04

11BE160MIMO_Ant6_6025



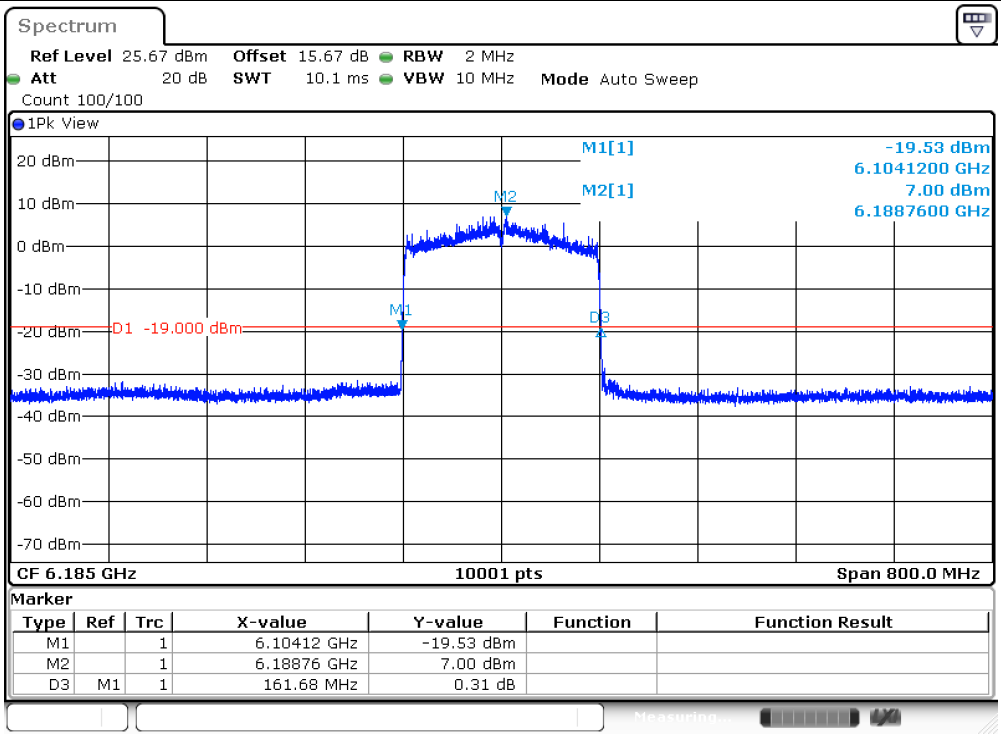
Date: 10.MAY.2025 13:10:29

11BE160MIMO_Ant17_6025



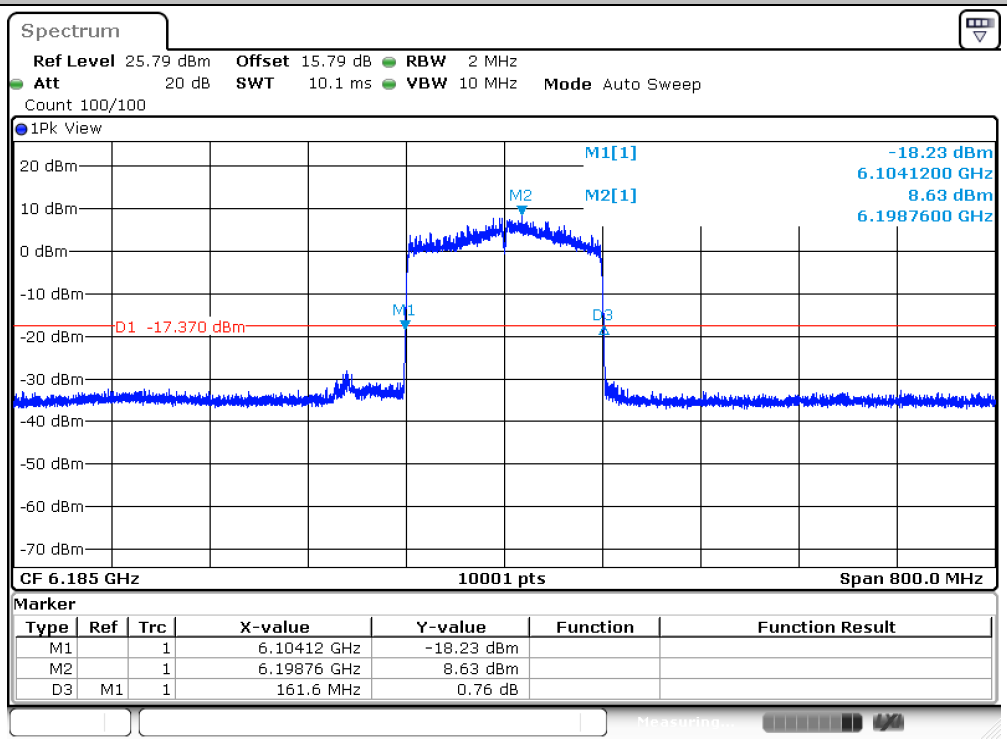
Date: 10.MAY.2025 13:11:13

11BE160MIMO_Ant6_6185



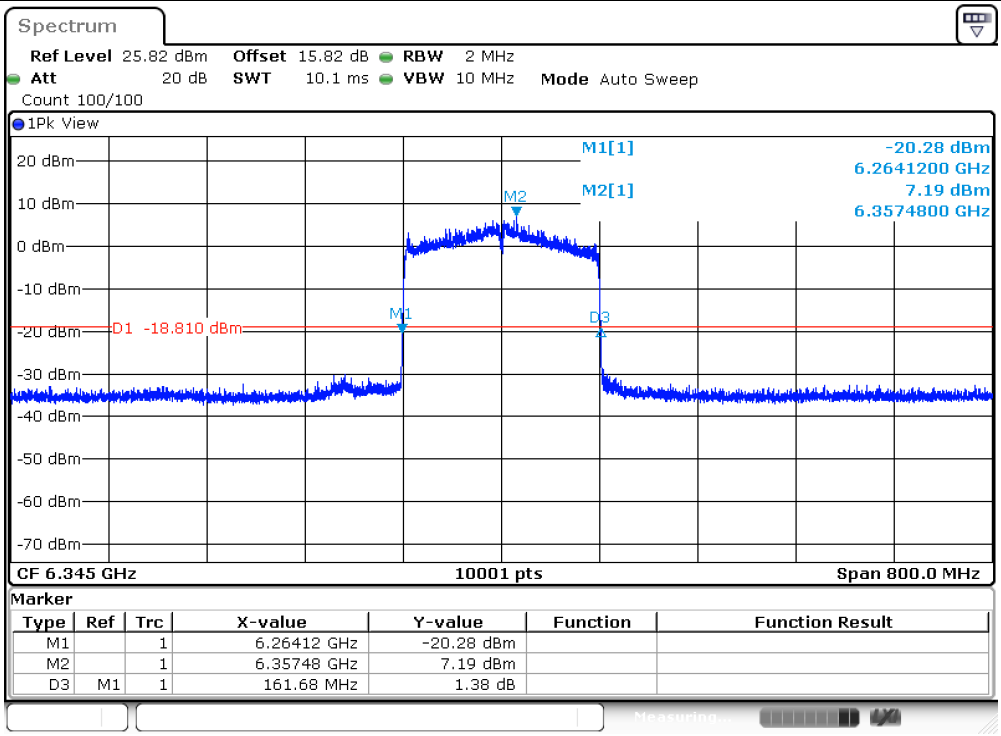
Date: 10.MAY.2025 13:12:31

11BE160MIMO_Ant17_6185



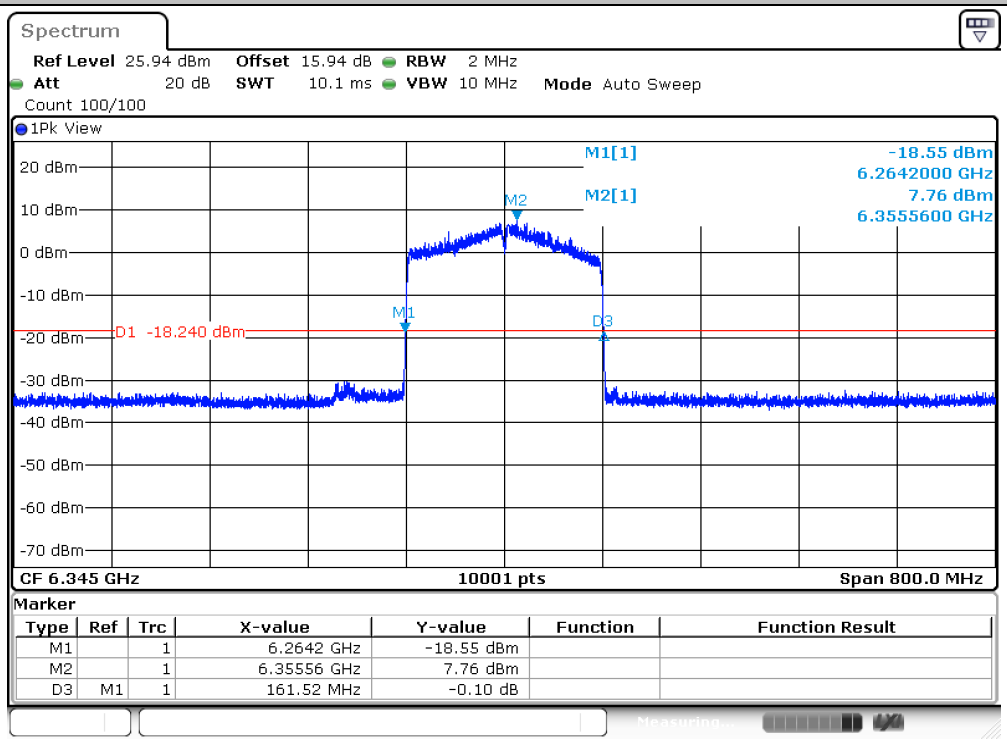
Date: 10.MAY.2025 13:13:15

11BE160MIMO_Ant6_6345



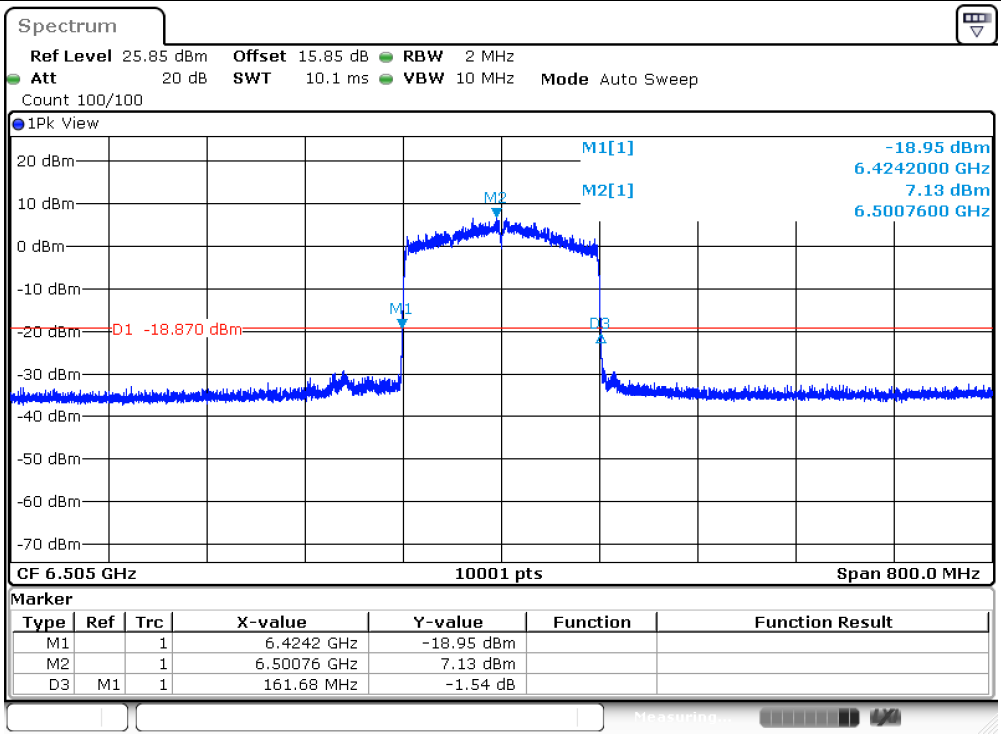
Date: 10.MAY.2025 13:14:16

11BE160MIMO_Ant17_6345



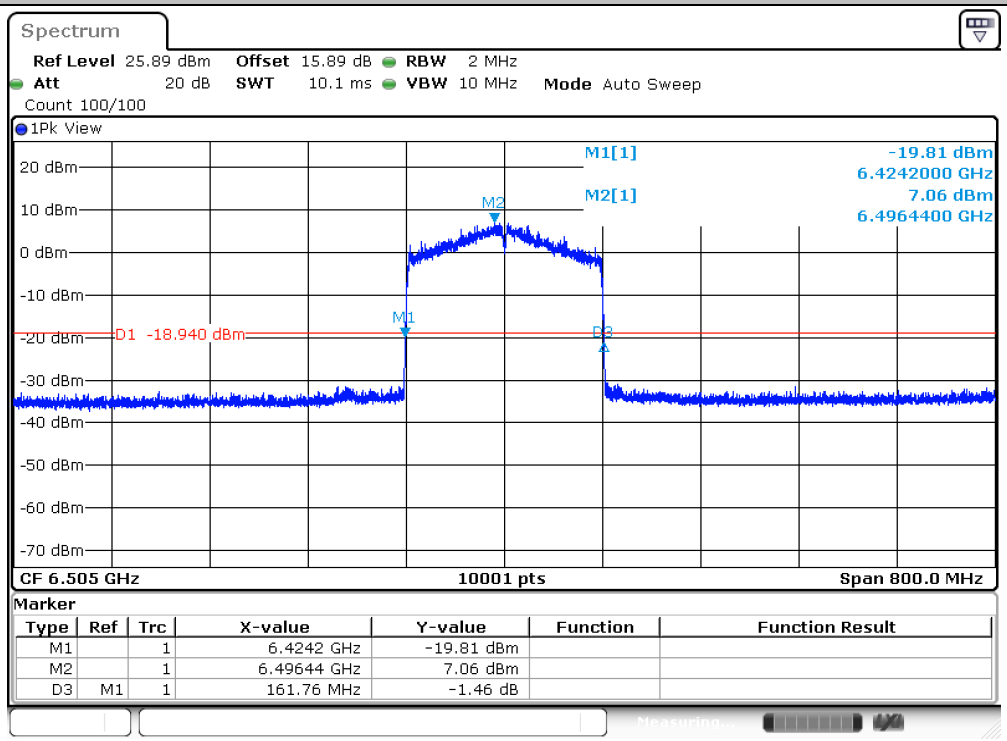
Date: 10.MAY.2025 13:15:00

11BE160MIMO_Ant6_6505



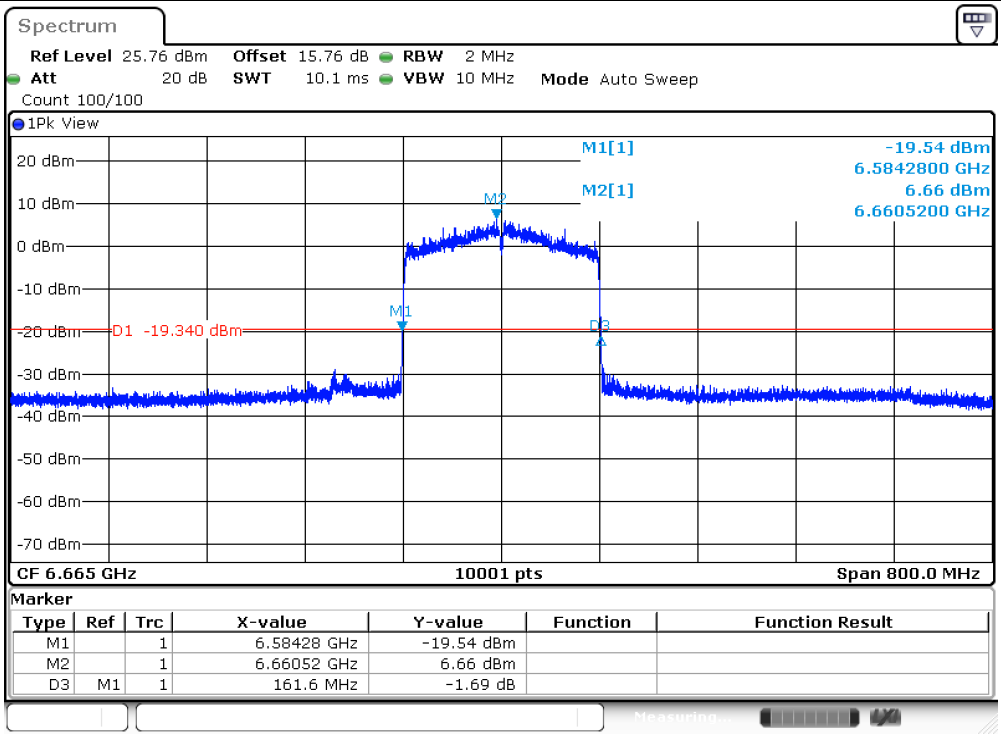
Date: 10.MAY.2025 13:16:01

11BE160MIMO_Ant17_6505



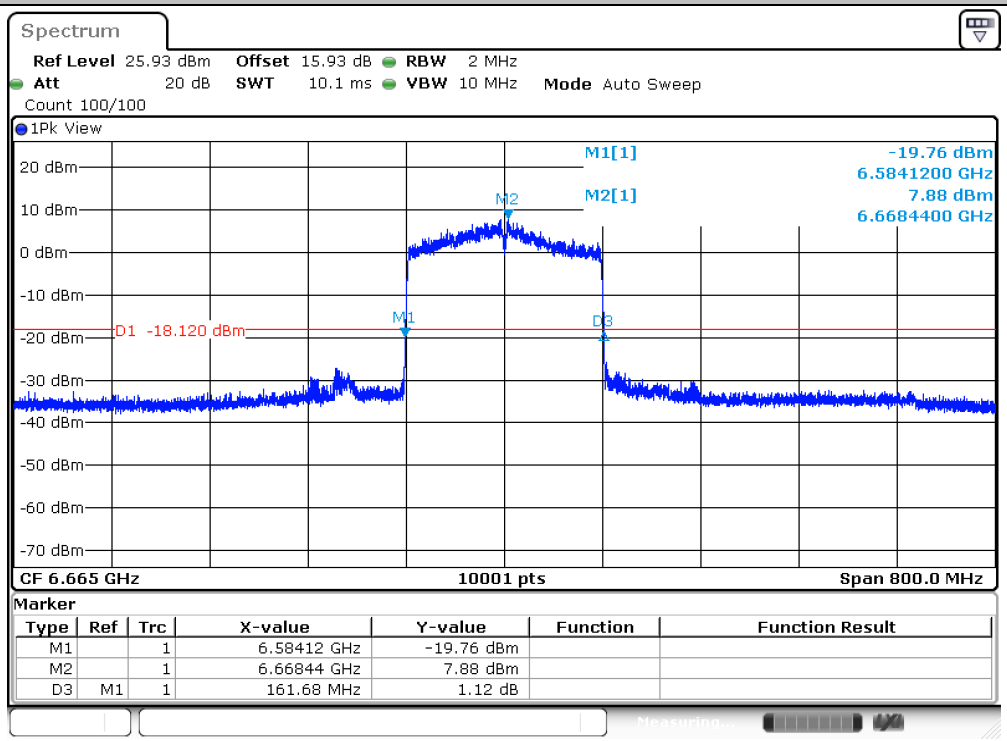
Date: 10.MAY.2025 13:16:45

11BE160MIMO_Ant6_6665



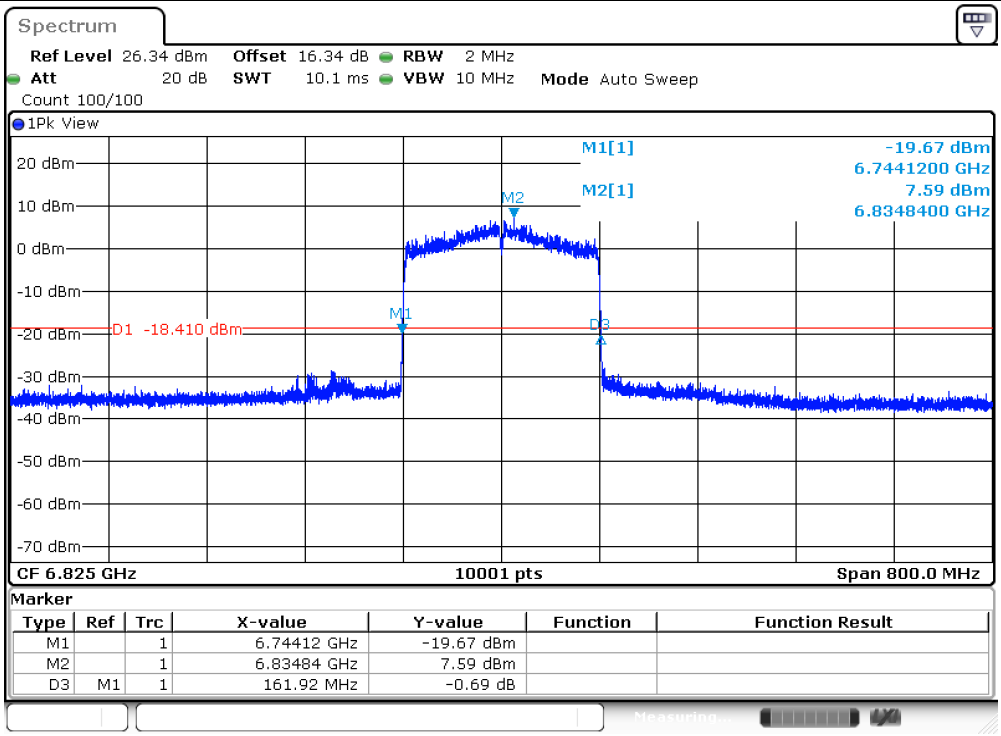
Date: 10.MAY.2025 13:17:46

11BE160MIMO_Ant17_6665



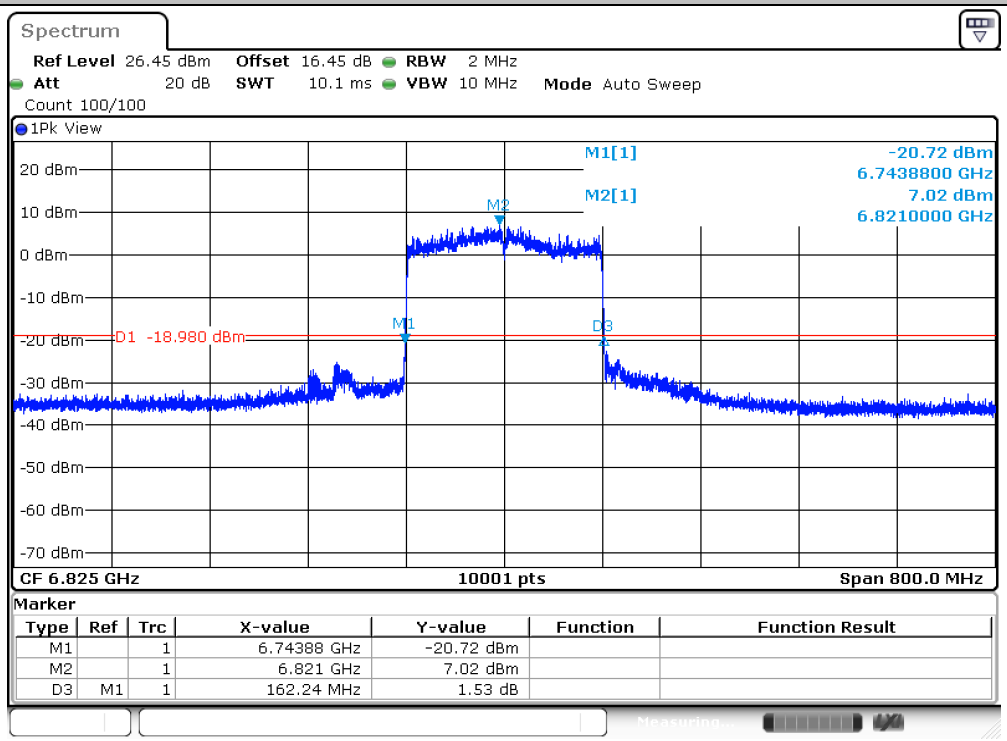
Date: 10.MAY.2025 13:18:30

11BE160MIMO_Ant6_6825



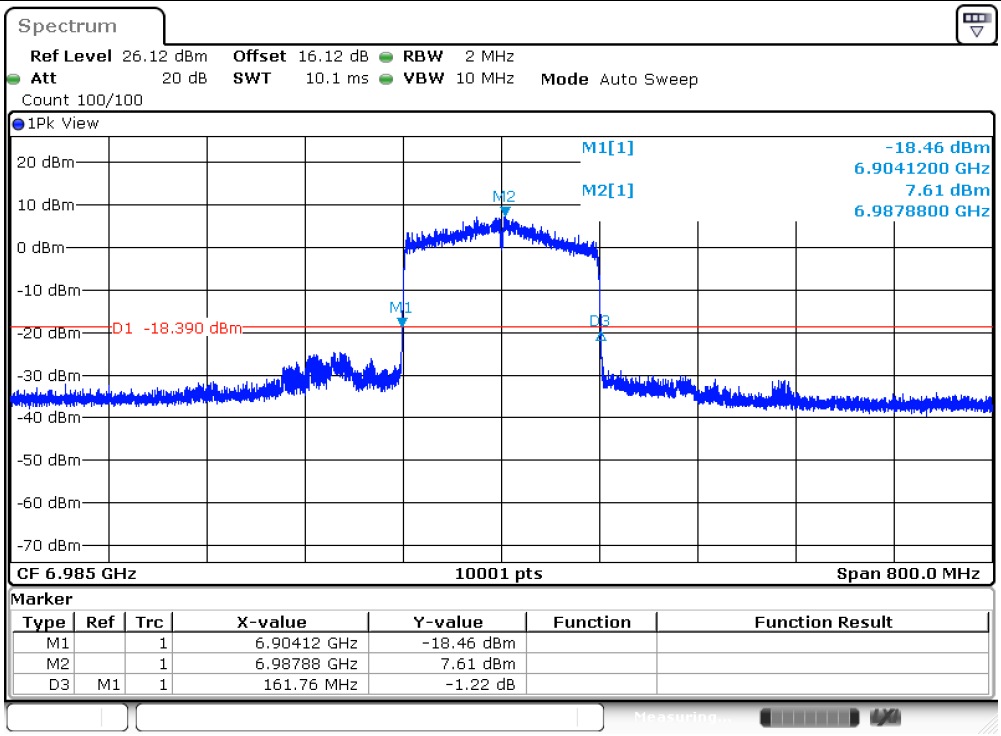
Date: 10.MAY.2025 13:19:28

11BE160MIMO_Ant17_6825



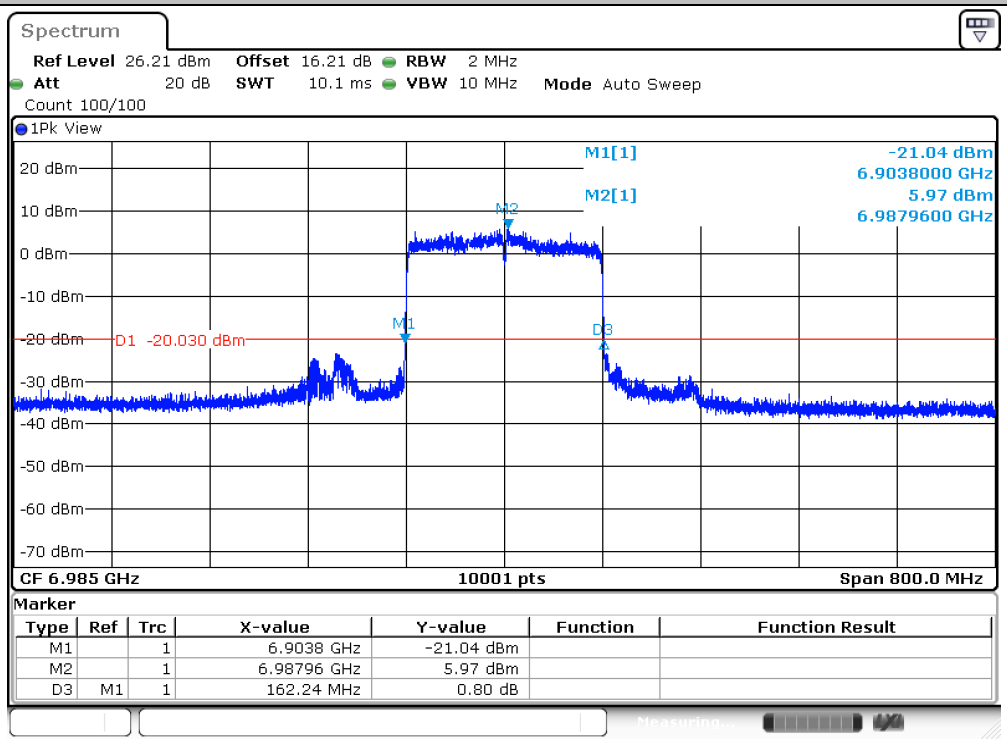
Date: 10.MAY.2025 13:20:13

11BE160MIMO_Ant6_6985



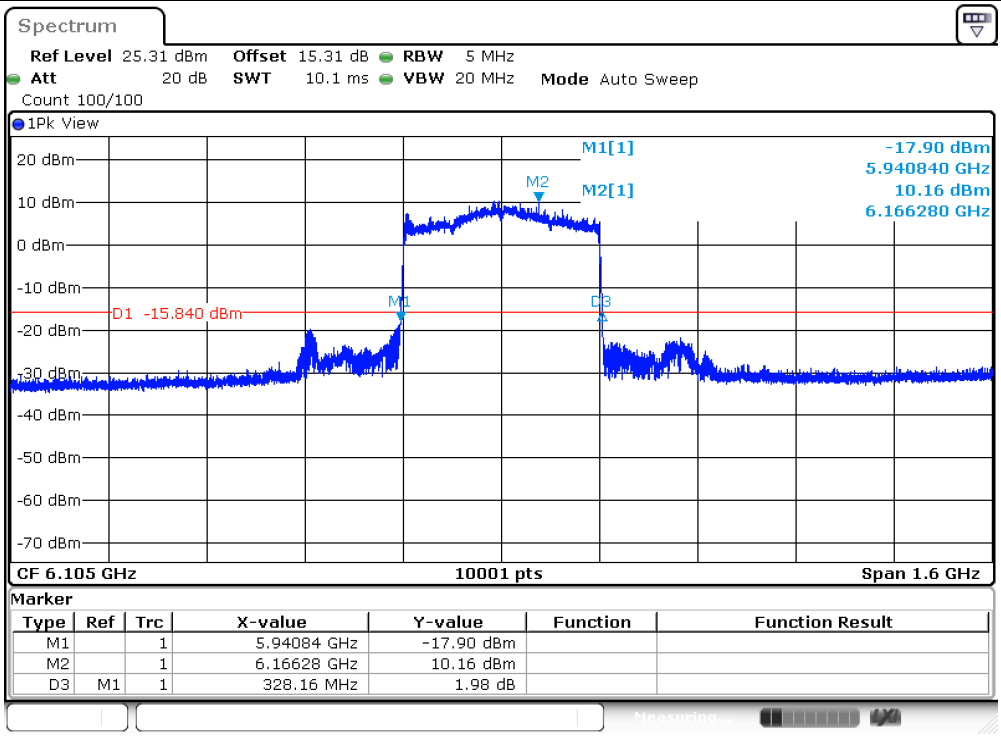
Date: 10.MAY.2025 13:21:24

11BE160MIMO_Ant17_6985

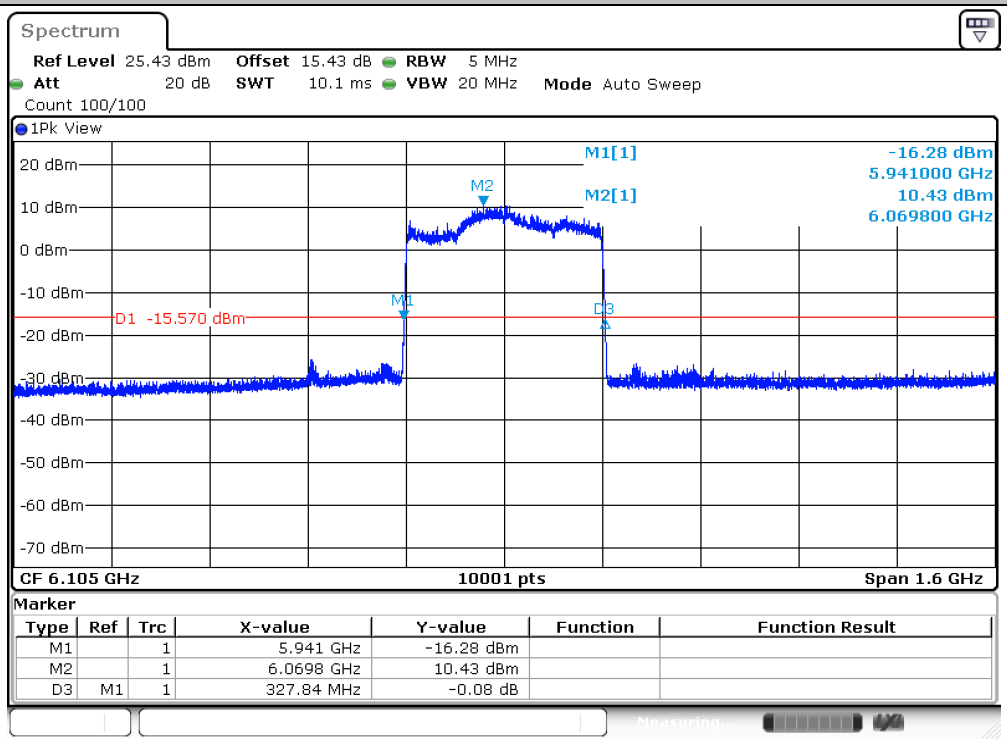


Date: 10.MAY.2025 13:22:08

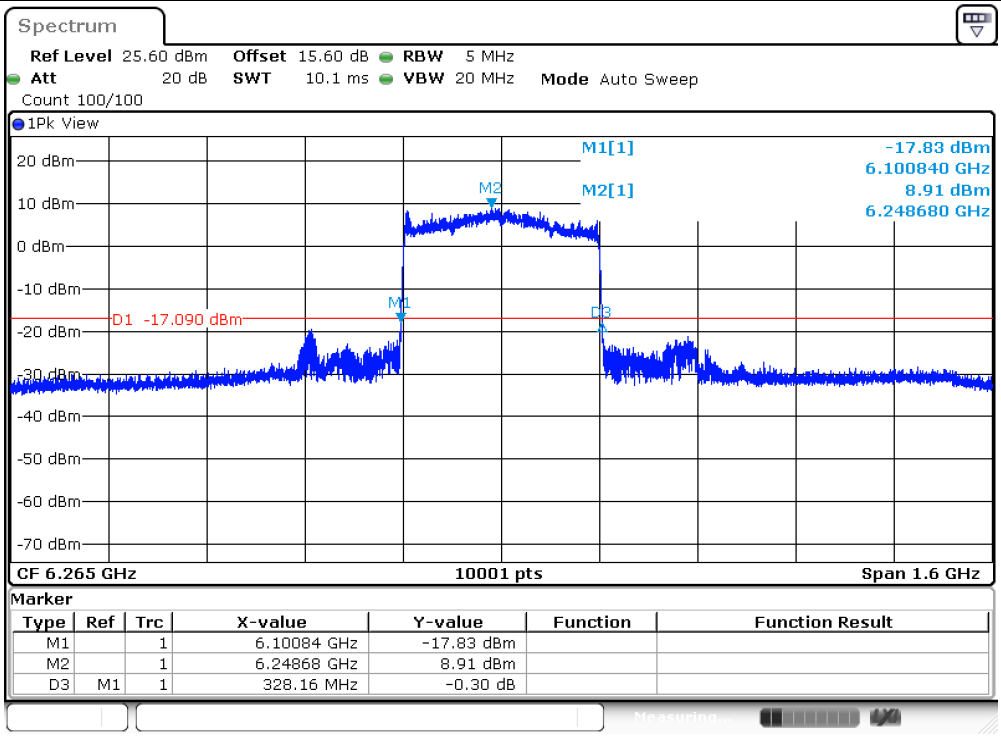
11BE320MIMO_Ant6_6105



11BE320MIMO_Ant17_6105

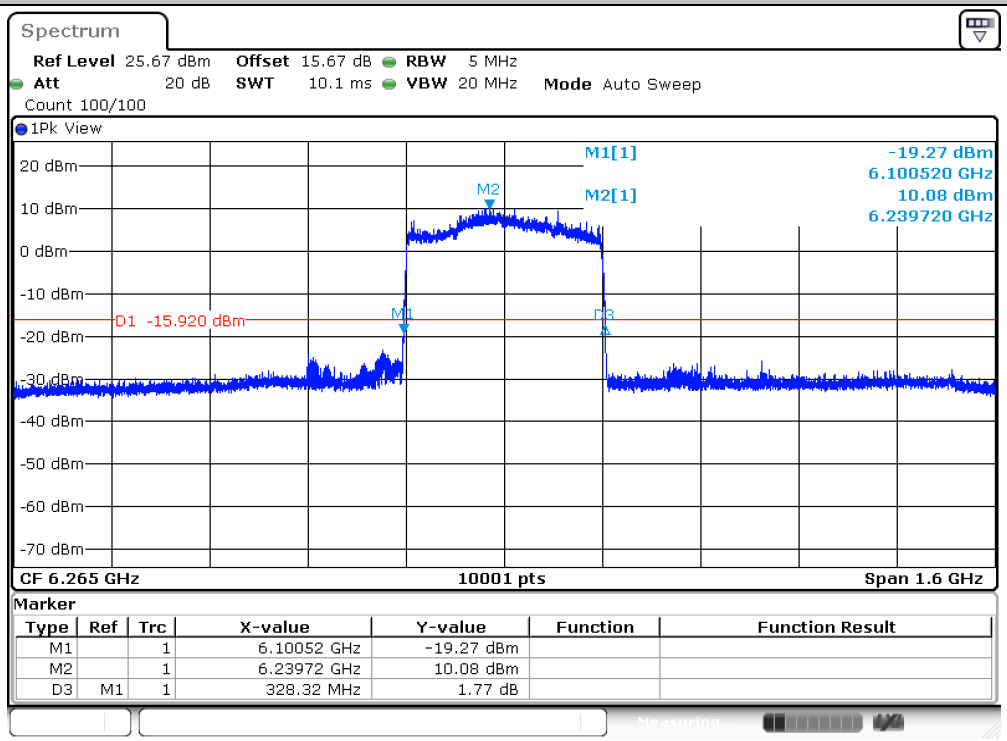


11BE320MIMO_Ant6_6265



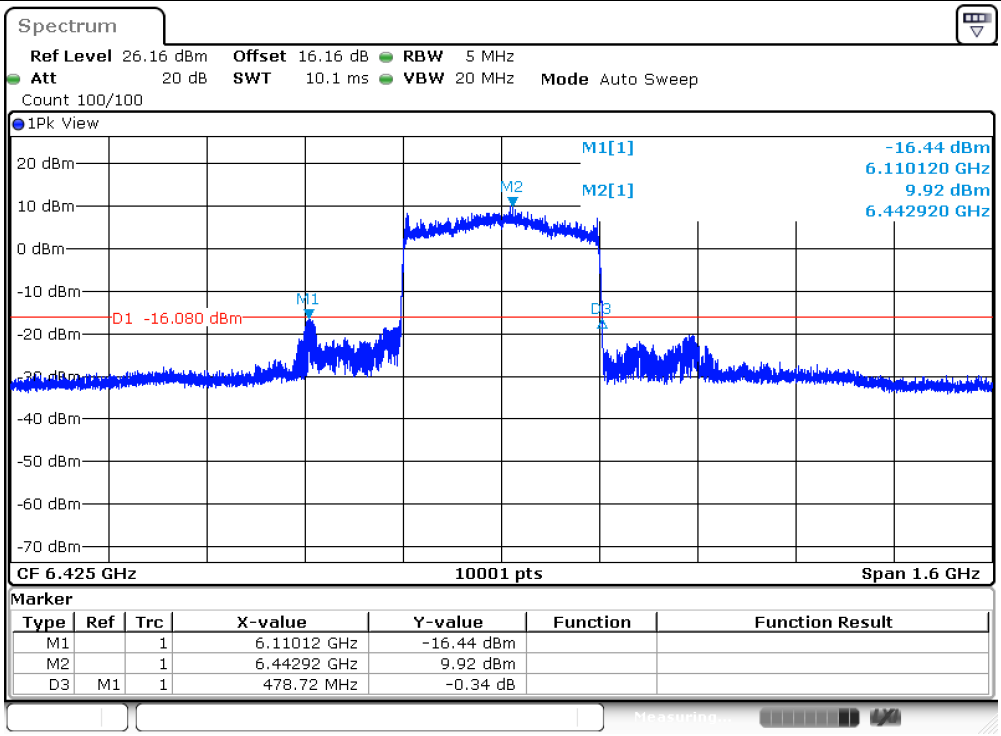
Date: 10.MAY.2025 13:34:17

11BE320MIMO_Ant17_6265



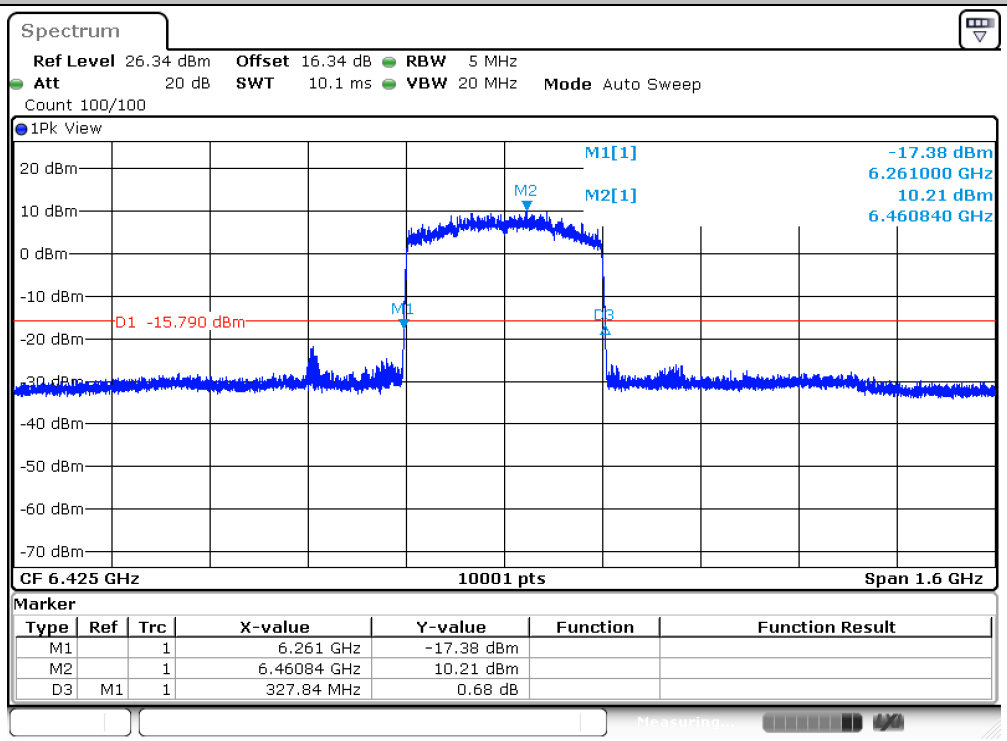
Date: 10.MAY.2025 13:35:02

11BE320MIMO_Ant6_6425



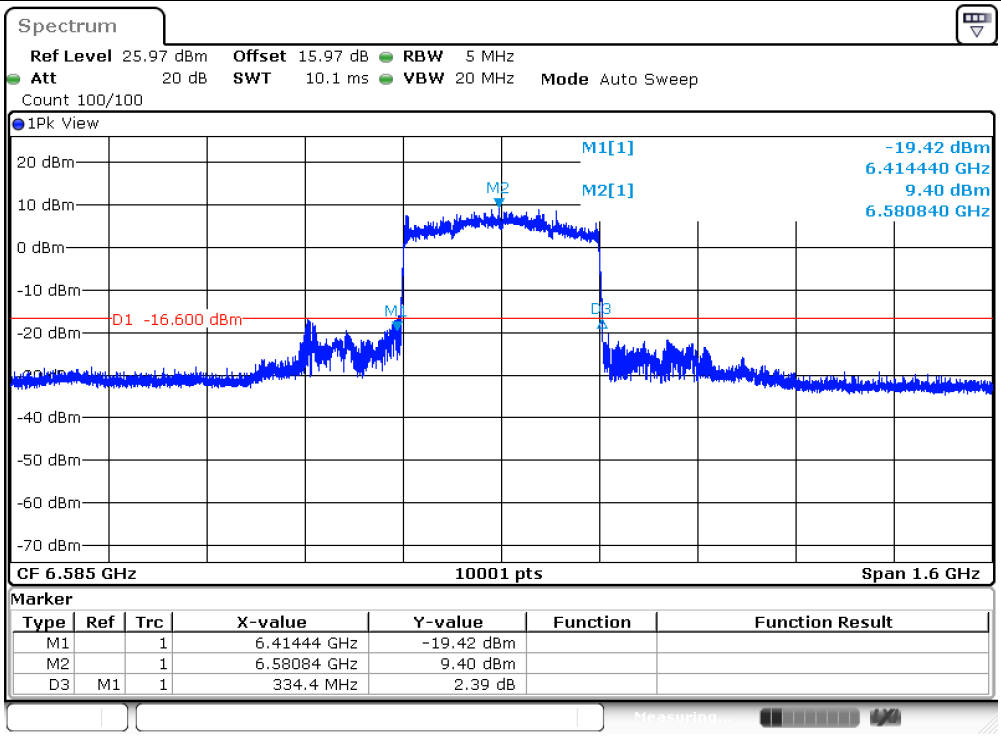
Date: 10.MAY.2025 13:36:12

11BE320MIMO_Ant17_6425



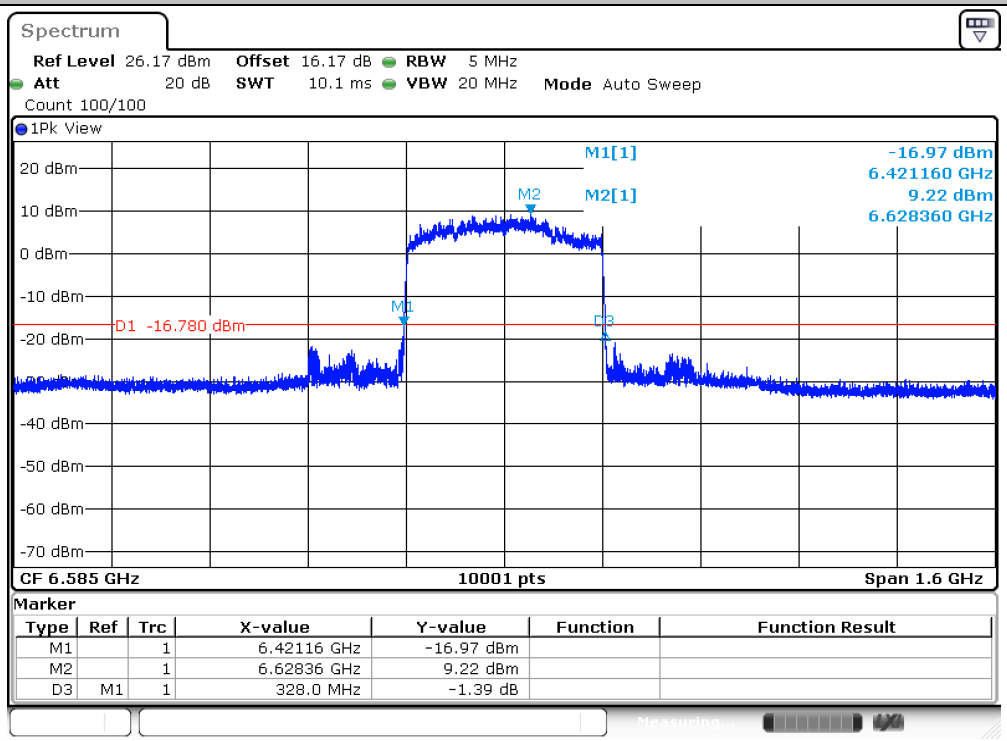
Date: 10.MAY.2025 13:36:56

11BE320MIMO_Ant6_6585



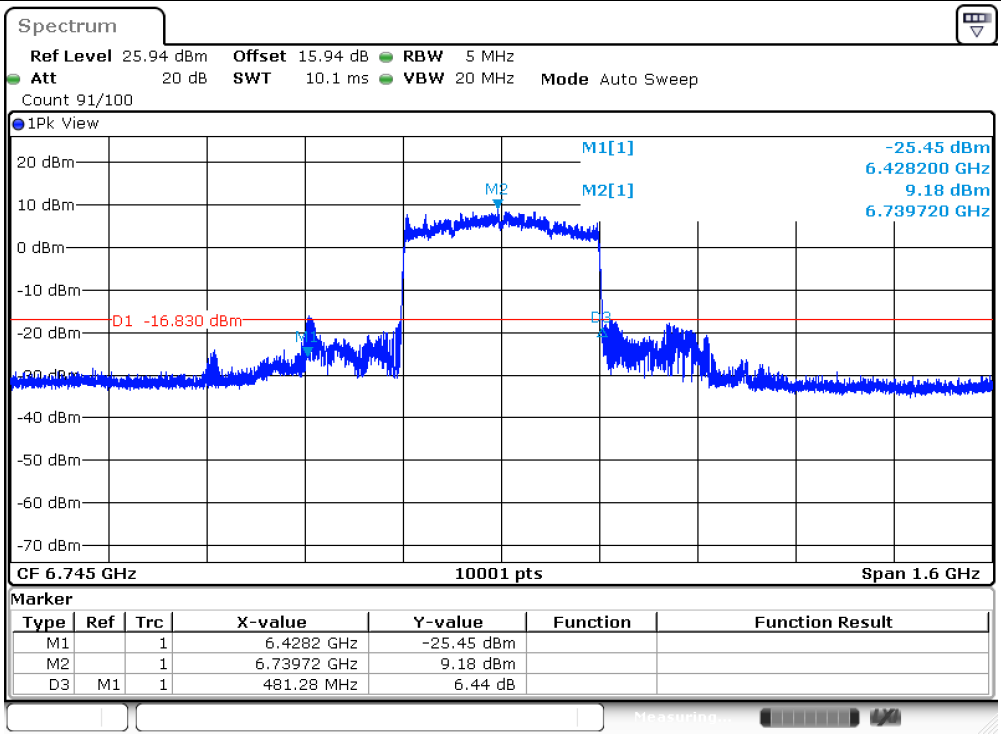
Date: 10.MAY.2025 13:38:11

11BE320MIMO_Ant17_6585



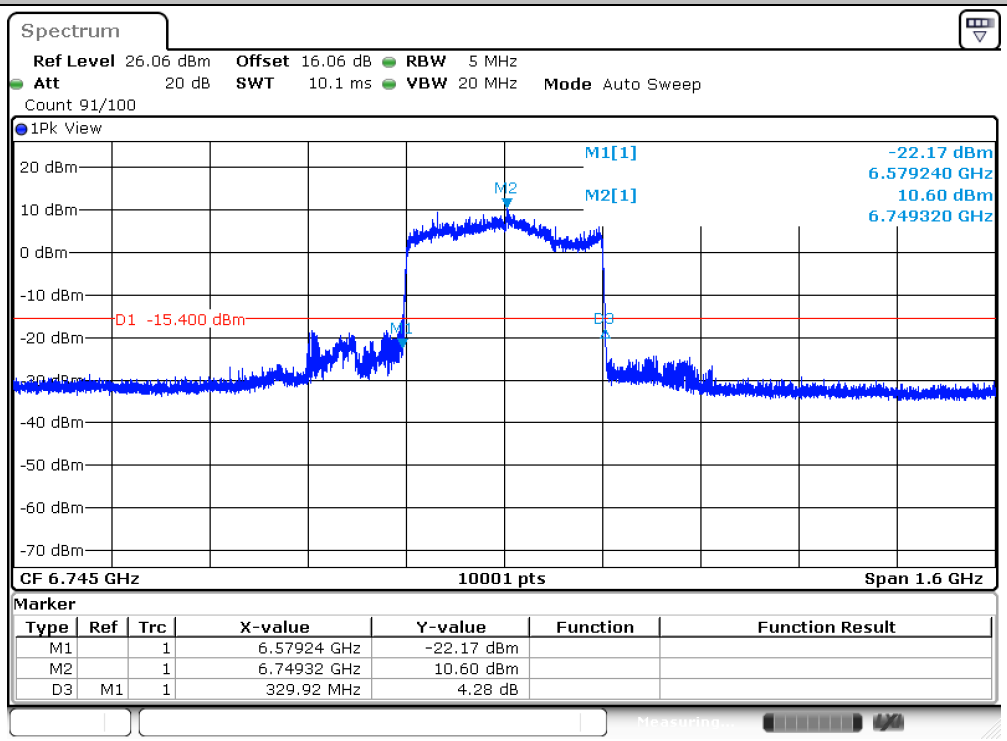
Date: 10.MAY.2025 13:38:55

11BE320MIMO_Ant6_6745



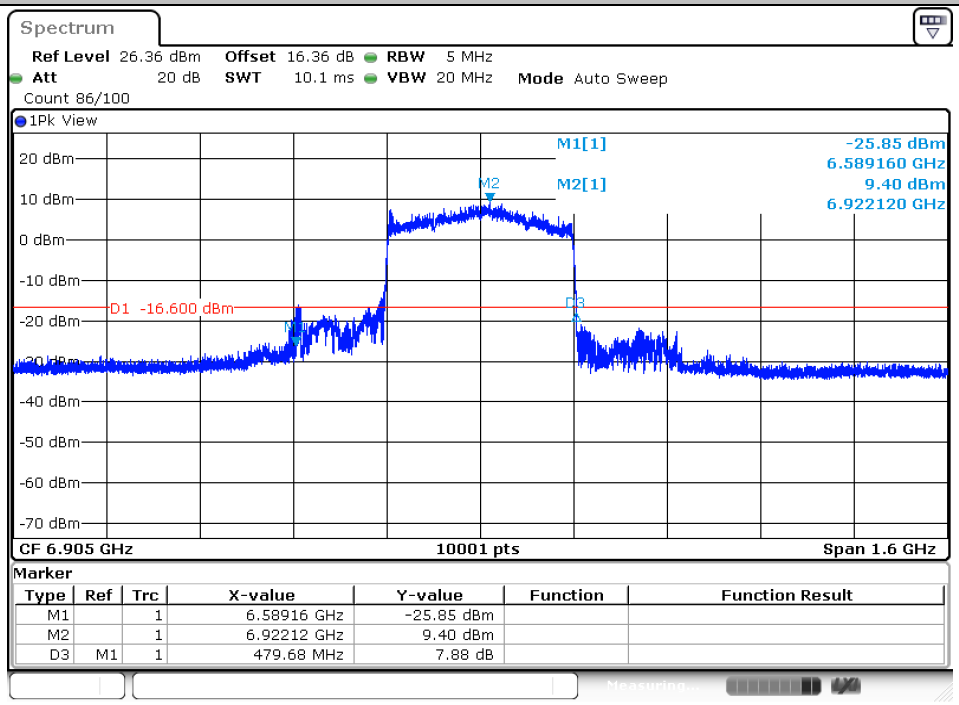
Date: 10.MAY.2025 13:39:59

11BE320MIMO_Ant17_6745



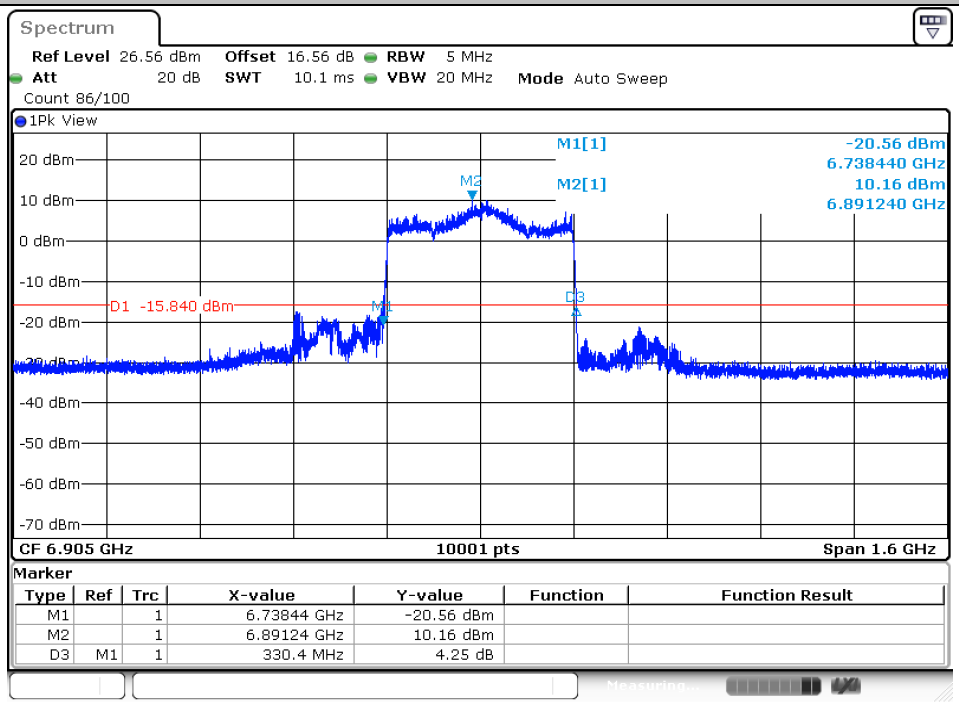
Date: 10.MAY.2025 13:40:43

11BE320MIMO_Ant6_6905



Date: 10.MAY.2025 13:41:38

11BE320MIMO_Ant17_6905



Date: 10.MAY.2025 13:42:22

Occupied channel bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11BE20MIMO	Ant6	5955	18.818	5945.5649	5964.3831	---	---
	Ant17	5955	18.774	5945.5649	5964.3391	---	---
	Ant6	6175	18.738	6165.5929	6184.3311	---	---
	Ant17	6175	18.758	6165.6089	6184.3671	---	---
	Ant6	6415	18.790	6405.5729	6424.3631	---	---
	Ant17	6415	18.646	6405.6729	6424.3191	---	---
	Ant6	6435	18.806	6425.5969	6444.4031	---	---
	Ant17	6435	18.774	6425.5609	6444.3351	---	---
	Ant6	6475	18.766	6465.5889	6484.3551	---	---
	Ant17	6475	18.818	6465.5489	6484.3671	---	---
	Ant6	6515	18.786	6505.5769	6524.3631	---	---
	Ant17	6515	18.762	6505.6009	6524.3631	---	---
	Ant6	6535	18.818	6525.5729	6544.3911	---	---
	Ant17	6535	18.762	6525.5889	6544.3511	---	---
	Ant6	6695	18.762	6685.6009	6704.3631	---	---
	Ant17	6695	18.838	6685.5609	6704.3991	---	---
	Ant6	6855	18.762	6845.5769	6864.3391	---	---
	Ant17	6855	18.770	6845.5689	6864.3391	---	---
	Ant6	6875	18.770	6865.5649	6884.3351	---	---
	Ant17	6875	18.790	6865.6329	6884.4231	---	---
	Ant6	6895	18.830	6885.5689	6904.3991	---	---
	Ant17	6895	18.810	6885.5969	6904.4071	---	---
	Ant6	6995	18.774	6985.5769	7004.3511	---	---
	Ant17	6995	18.770	6985.5649	7004.3351	---	---
	Ant6	7095	18.786	7085.5849	7104.3711	---	---
	Ant17	7095	18.782	7085.5649	7104.3471	---	---
11BE40MIMO	Ant6	5965	37.492	5946.2819	5983.7741	---	---
	Ant17	5965	37.516	5946.2019	5983.7181	---	---
	Ant6	6165	37.668	6146.0979	6183.7661	---	---
	Ant17	6165	37.580	6146.1459	6183.7261	---	---
	Ant6	6405	37.580	6386.1619	6423.7421	---	---
	Ant17	6405	37.476	6386.3139	6423.7901	---	---
	Ant6	6445	37.564	6426.2259	6463.7901	---	---
	Ant17	6445	37.700	6426.1379	6463.8381	---	---
	Ant6	6485	37.756	6466.1699	6503.9261	---	---
	Ant17	6485	37.684	6466.0659	6503.7501	---	---
	Ant6	6525	37.604	6506.1939	6543.7981	---	---

	Ant17	6525	37.628	6506.1459	6543.7741	---	---
	Ant6	6565	37.956	6545.9619	6583.9181	---	---
	Ant17	6565	37.652	6546.1859	6583.8381	---	---
	Ant6	6685	37.836	6666.1219	6703.9581	---	---
	Ant17	6685	37.724	6666.0739	6703.7981	---	---
	Ant6	6845	37.852	6826.0339	6863.8861	---	---
	Ant17	6845	37.660	6826.1219	6863.7821	---	---
	Ant6	6885	37.596	6866.1699	6903.7661	---	---
	Ant17	6885	37.812	6866.1059	6903.9181	---	---
	Ant6	6925	37.860	6906.0979	6943.9581	---	---
	Ant17	6925	37.468	6906.1699	6943.6381	---	---
	Ant6	6965	37.732	6946.0659	6983.7981	---	---
	Ant17	6965	37.668	6946.0739	6983.7421	---	---
	Ant6	7085	37.580	7066.1539	7103.7341	---	---
	Ant17	7085	37.796	7066.0019	7103.7981	---	---
11BE80MIMO	Ant6	5985	77.608	5946.2679	6023.8761	---	---
	Ant17	5985	76.664	5946.6198	6023.2842	---	---
	Ant6	6145	77.144	6106.4599	6183.6041	---	---
	Ant17	6145	76.648	6106.6038	6183.2522	---	---
	Ant6	6385	77.304	6346.4279	6423.7321	---	---
	Ant17	6385	77.320	6346.2039	6423.5241	---	---
	Ant6	6465	77.064	6426.3959	6503.4602	---	---
	Ant17	6465	76.696	6426.7318	6503.4282	---	---
	Ant6	6545	76.792	6506.5398	6583.3322	---	---
	Ant17	6545	76.984	6506.6838	6583.6681	---	---
	Ant6	6625	76.968	6586.4439	6663.4122	---	---
	Ant17	6625	76.904	6586.3799	6663.2842	---	---
	Ant6	6705	76.872	6666.4759	6743.3482	---	---
	Ant17	6705	76.712	6666.7158	6743.4282	---	---
	Ant6	6785	76.648	6746.7318	6823.3802	---	---
	Ant17	6785	77.112	6746.1879	6823.3002	---	---
	Ant6	6865	77.368	6826.3479	6903.7161	---	---
	Ant17	6865	77.224	6826.5878	6903.8121	---	---
	Ant6	6945	77.048	6906.2839	6983.3322	---	---
	Ant17	6945	77.464	6906.1239	6983.5881	---	---
	Ant6	7025	77.256	6986.2039	7063.4602	---	---
	Ant17	7025	77.288	6986.4759	7063.7641	---	---
11BE160MIMO	Ant6	6025	156.53	5946.6718	6103.2002	---	---
	Ant17	6025	156.78	5946.4479	6103.2322	---	---
	Ant6	6185	156.05	6106.7358	6262.7842	---	---
	Ant17	6185	155.98	6106.7998	6262.7842	---	---
	Ant6	6345	156.18	6266.5758	6422.7522	---	---

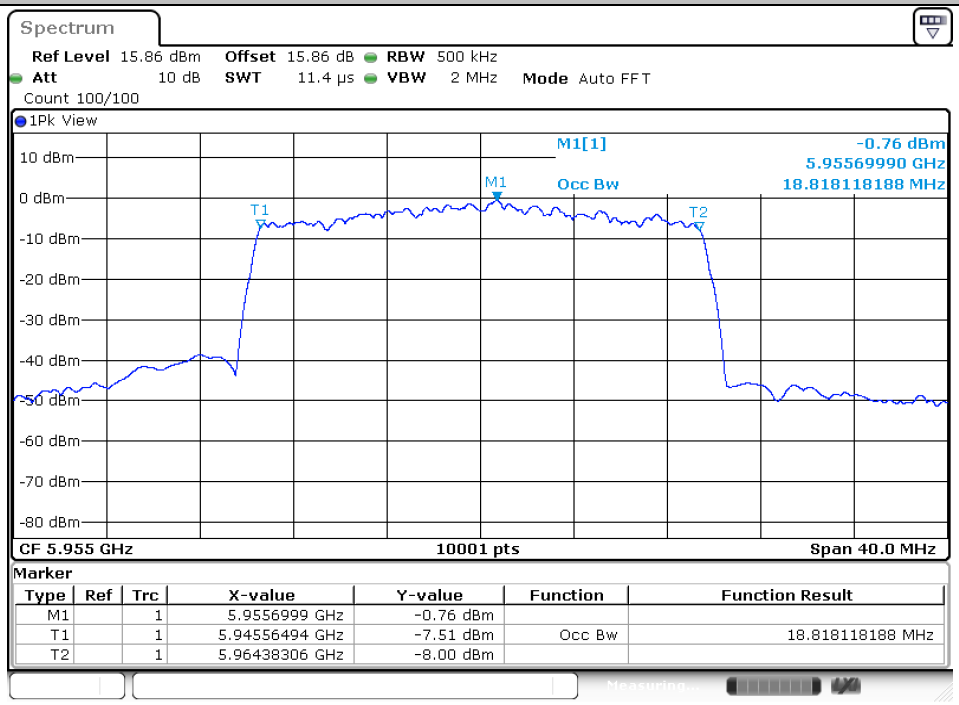
	Ant17	6345	154.93	6267.0238	6421.9523	---	---
	Ant6	6505	155.82	6426.7678	6582.5922	---	---
	Ant17	6505	154.61	6427.6317	6582.2403	---	---
	Ant6	6665	155.82	6586.8638	6742.6882	---	---
	Ant17	6665	155.82	6586.9918	6742.8162	---	---
	Ant6	6825	156.27	6746.7038	6902.9762	---	---
	Ant17	6825	157.52	6746.2879	6903.8081	---	---
	Ant6	6985	156.08	6906.2239	7062.3043	---	---
	Ant17	6985	157.49	6905.8399	7063.3282	---	---
11BE320MIMO	Ant6	6105	317.41	5945.6559	6263.0642	≤320	PASS
	Ant17	6105	316.00	5946.5518	6262.5522	≤320	PASS
	Ant6	6265	317.66	6105.0800	6422.7442	≤320	PASS
	Ant17	6265	315.36	6106.1039	6421.4644	≤320	PASS
	Ant6	6425	318.37	6264.3761	6582.7442	≤320	PASS
	Ant17	6425	314.66	6266.9358	6581.5923	≤320	PASS
	Ant6	6585	318.37	6424.6320	6743.0002	≤320	PASS
	Ant17	6585	314.72	6427.8317	6742.5522	≤320	PASS
	Ant6	6745	318.37	6585.6559	6904.0241	≤320	PASS
	Ant17	6745	317.54	6586.0399	6903.5761	≤320	PASS
	Ant6	6905	317.34	6744.6960	7062.0403	≤320	PASS
	Ant17	6905	318.05	6745.3360	7063.3842	≤320	PASS

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

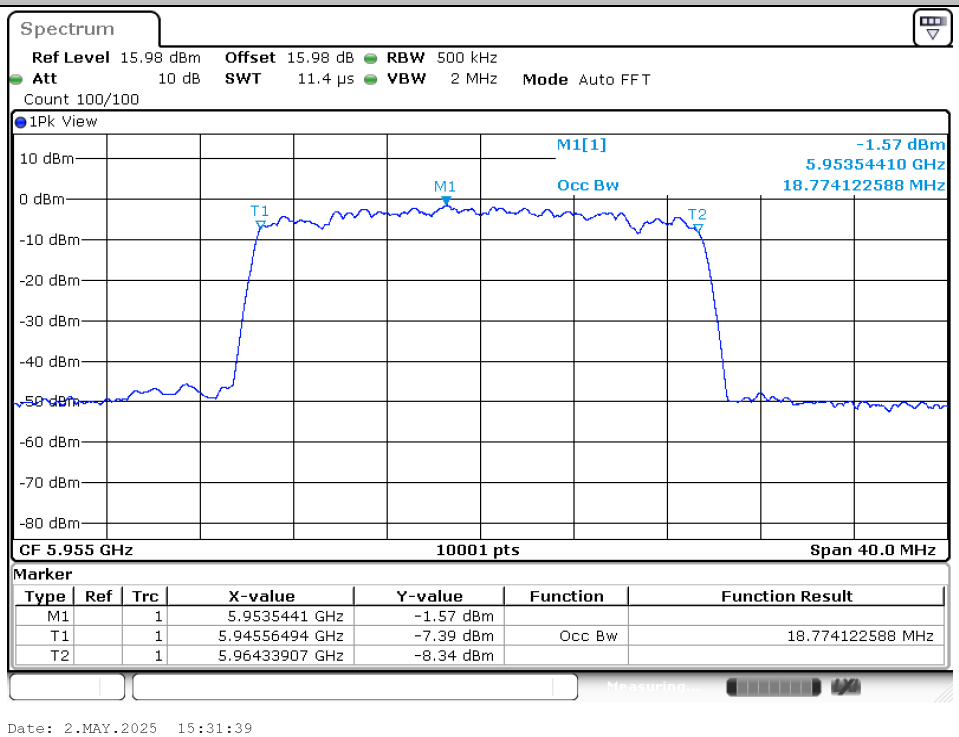
Note2: For channels with a nominal bandwidth less than 320MHz(e.g 20,40,80,160MHz), compliance is demonstrated by way of the 26dB EBW.

Test Graphs

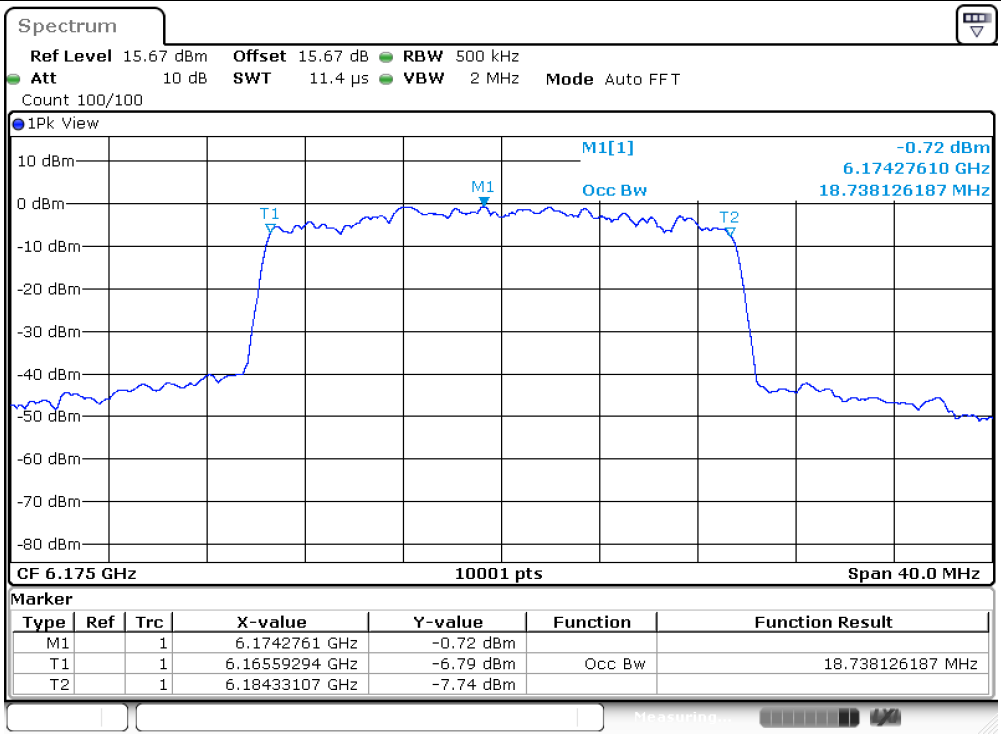
11BE20MIMO_Ant6_5955



11BE20MIMO_Ant17_5955



11BE20MIMO_Ant6_6175



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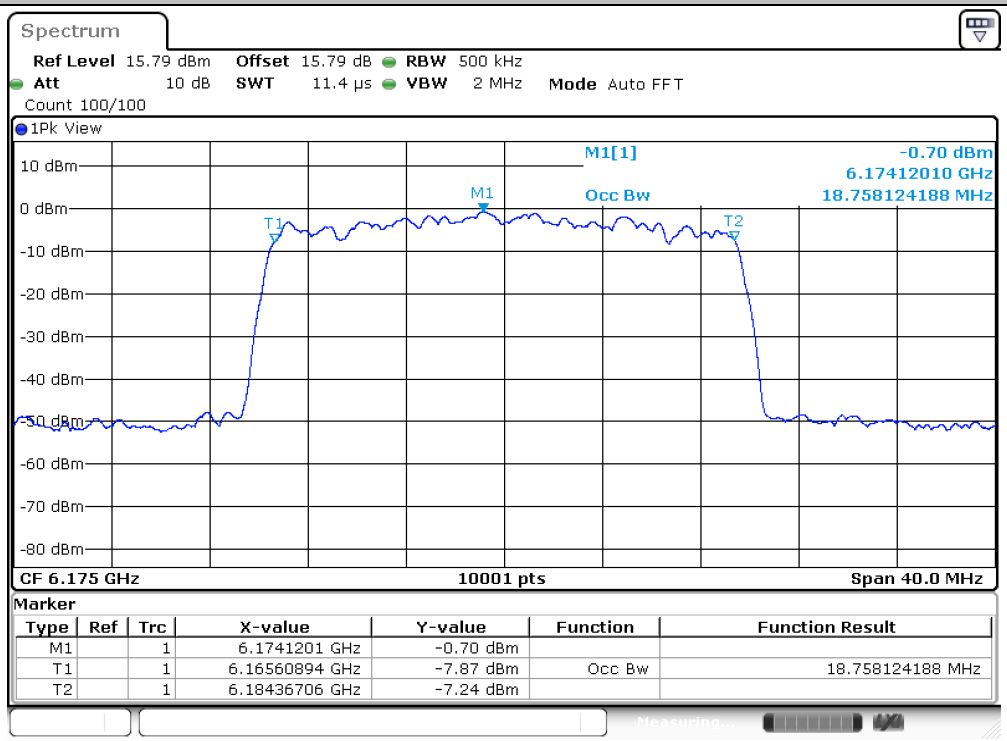
11BE20MIMO_Ant17_6175



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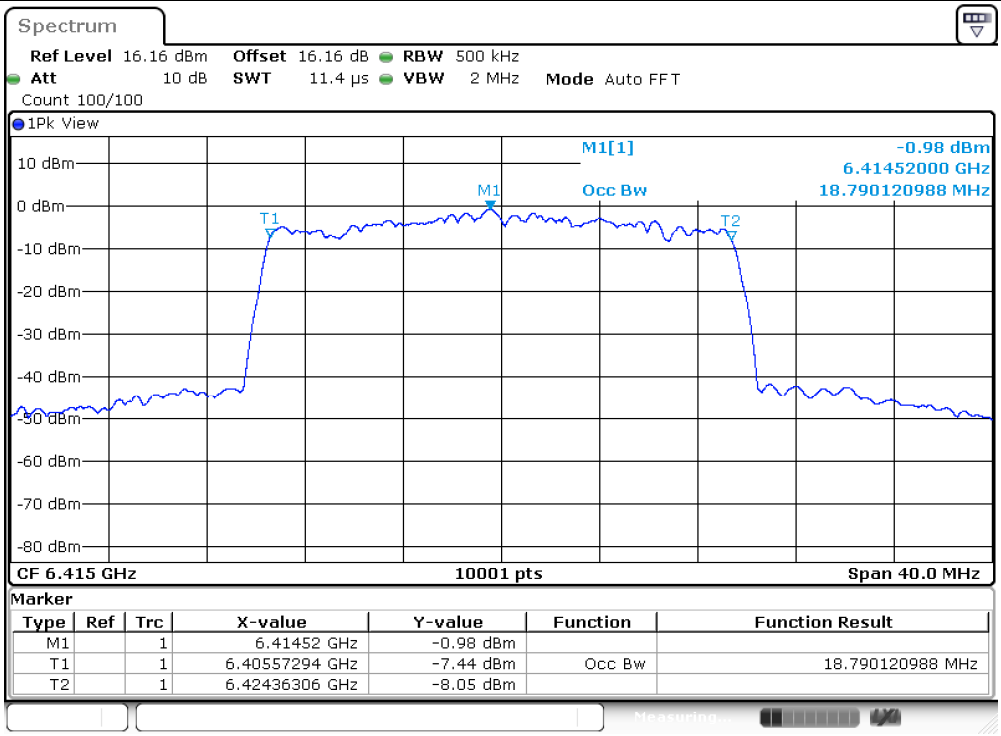

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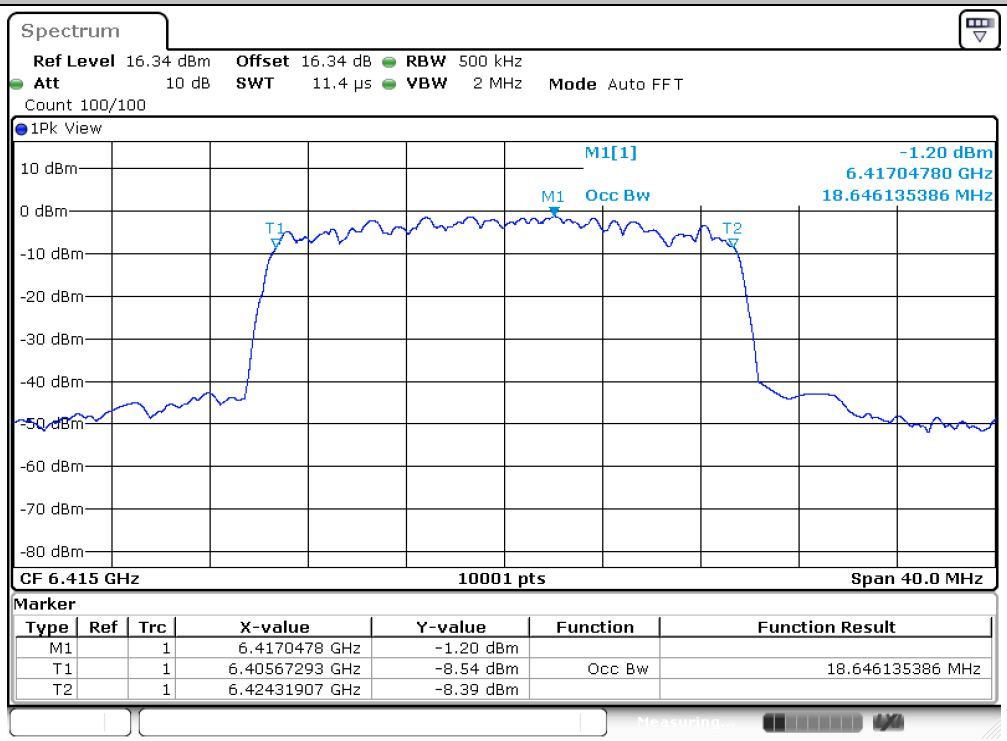

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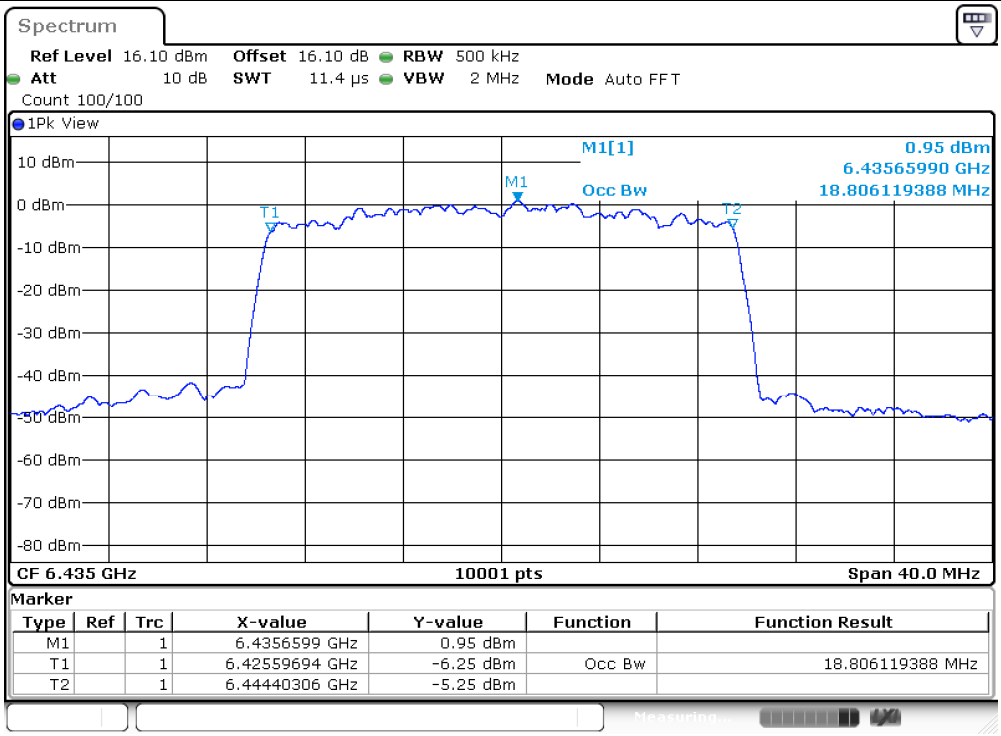

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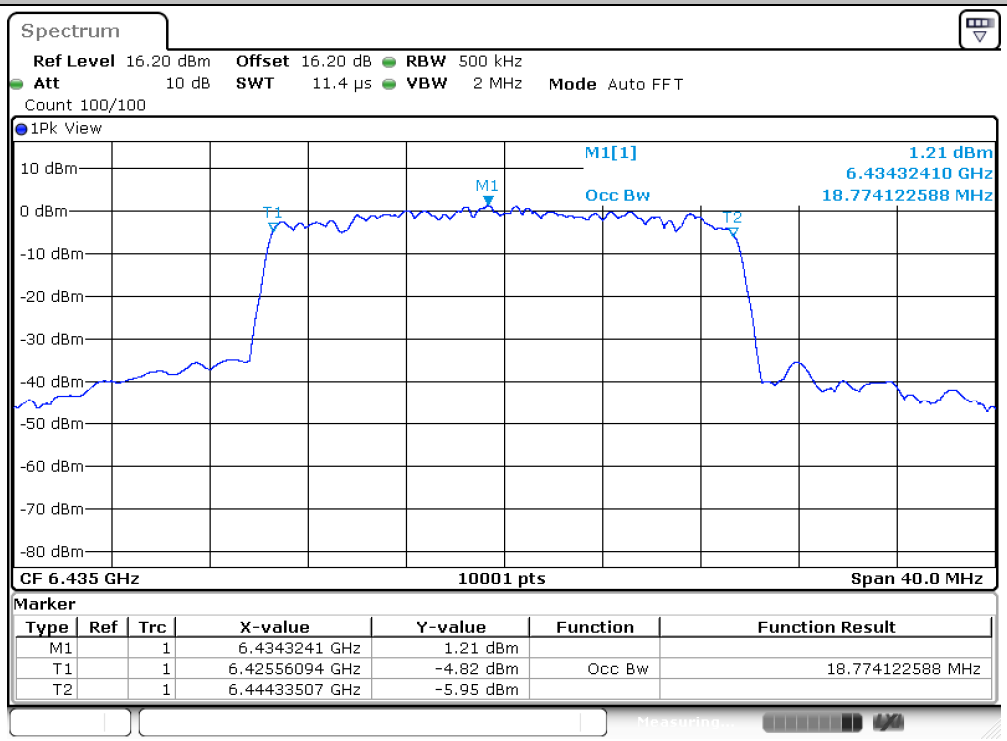
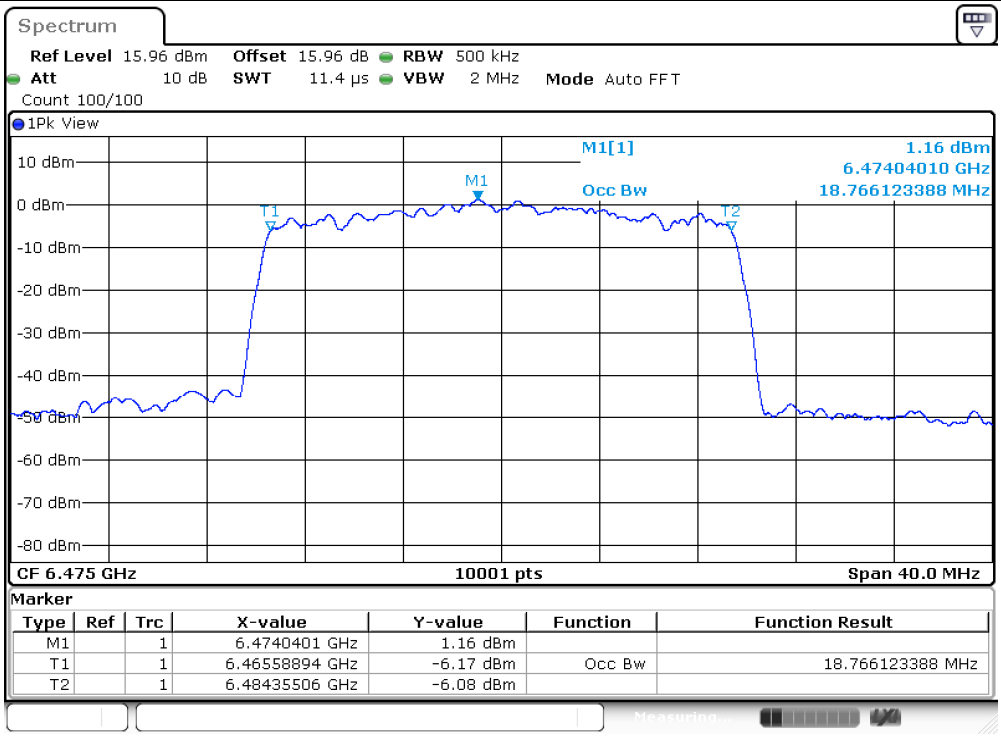


11BE20MIMO_Ant6_6475



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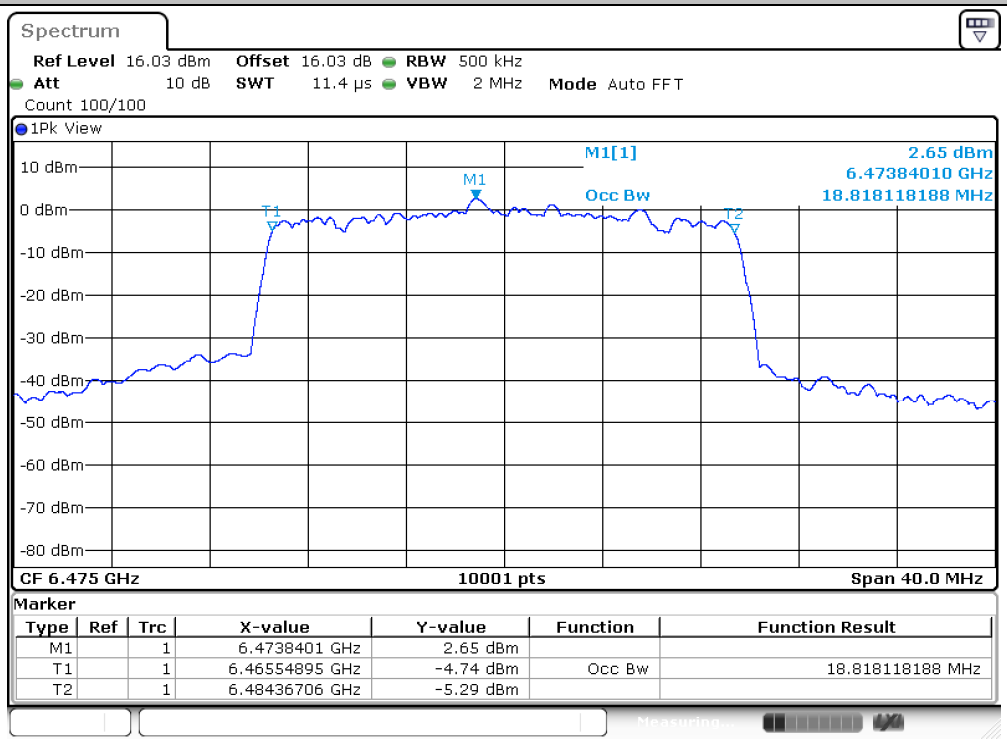

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