FCC 47 CFR PART 27 SUBPART H

TEST REPORT

For

ActiveHome

Model No.: AH11-22-11

Trade Name: Upstreem S.A

Issued to

UPSTREEM S.A
Rue de Gosselies 13/9 Jumet 6040 Belgium

Issued by

Compliance Certification Services Inc.
Wugu Laboratory
No.11, Wugong 6th Rd., Wugu Dist.,
New Taipei City, Taiwan. (R.O.C.)
Issued Date: July 22, 2021

Revision History

Rev.	Issue Date	Revisions	Effect Page	Revised By
00	July 22, 2021	Initial Issue	ALL	Doris Chu

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1. TEST RESULT CERTIFICATION

Applicant:	UPSTREEM S.A Rue de Gosselies 13/9 Jumet 6040 Belgium
Manufacturer:	IMEC Taiwan Co. 4F. No.6-2, Dusing Rd., Hsinchu Science Park, Hsinchu, Taiwan
Equipment Under Test:	ActiveHome
Trade Name:	Upstreem S.A
Model No.:	AH11-22-11
Date of Test:	April 15 ~ 21, 2021

APPLICABLE STANDARDS	
Standard	**TEST RESULT**
FCC Part 27, Subpart H, FCC Part 2	No non-compliance noted
Statements of Conformity	
Determination of compliance is based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.	

The above equipment has been tested by Compliance Certification Services Inc., and found compliance with the requirements set forth in the technical standards mentioned above. The results of testing in this report apply only to the product/system, which was tested. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

Approved by:

Kevin Tsai
Deputy Manager
Compliance Certification Services Inc.

2. EUT DESCRIPTION

Product	ActiveHome	
Model No.	AH11-22-11	
Model Discrepancy	N/A	
Trade	Upstreem S.A	
Received Date	March 8, 2021	
Power Supply	1. Power from Adapter. Microsoft Japan Co., Ltd / 1621 I/P: 100-240VAC, 50/60Hz, 0.18A O/P: 5.0VDC, 1.2A 2. Power from Battery. Rating: 3.7Vdc, 650mAh	
Modulation Technology	Cat-M1 Band 12	QPSK, 16QAM
Frequency Range	Cat-M1 Band 12 Channel Bandwidth: 1.4MHz	669.7MHz ~ 715.3MHz
	Cat-M1 Band 12 Channel Bandwidth: 3MHz	700.5MHz ~ 714.5MHz
	Cat-M1 Band 12 Channel Bandwidth: 5MHz	701.5MHz ~ 713.5MHz
	Cat-M1 Band 12 Channel Bandwidth: 10MHz	704MHz ~ 711MHz
Antenna Specification	Antenna type: FPC Antenna / Gain: 4.5 dBi	

Remark:

1. The sample selected for test was engineering sample that approximated to production product and was provided by manufacturer.
2. Disclaimer: Antenna information is provided by the applicant, test results of this report are applicable to the sample EUT received.

3. TEST METHODOLOGY

3.1 DESCRIPTION OF TEST TYPE

The EUT (model: AH11-22-11) had been tested under operating condition.

Software used to control the EUT for staying in continuous transmitting mode was programmed.

LTE Band 12: 699 MHz ~ 716 MHz

Three channels had been tested for each channel bandwidth.

Channel Bandwidth	1.4MHz		3MHz		5MHz		10MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low CH	23017	699.7	23025	700.5	23035	701.5	23060	704
Middle CH	23095	707.5	23095	707.5	23095	707.5	23095	707.5
High CH	23173	715.3	23165	714.5	23155	713.5	23130	711

3.2 THE WORST MODE OF MEASUREMENT

3.2.1 The worst mode of measurement

Radiated Emission Measurement Above 1G	
Test Condition	**Radiated Emission Above 1G**
Power supply Mode	**Mode 1: EUT power by Adapter** **Mode 2: EUT power by Battery**
Worst Mode	☒ **Mode 1** ☐ **Mode 2** ☐ **Mode 3** ☐ **Mode 4**
Worst Position	☒ **Placed in fixed position at X-Plane (E2-Plane)**

Radiated Emission Measurement Below 1G	
Test Condition	**Radiated Emission Below 1G**
Power supply Mode	**Mode 1: EUT power by Adapter** **Mode 2: EUT power by Battery**
Worst Mode	☒ **Mode 1** ☐ **Mode 2** ☐ **Mode 3** ☐ **Mode 4**

Remark:
1. The worst mode was record in this test report.
2. EUT pre-scanned in axis X and two polarity, for radiated measurement. The worst case(X-Plane) were recorded in this report

4. TEST SUMMARY

FCC Standard Section	Report Section	Test Item	Result
-	2	Antenna Requirement	Pass
27.50(c)	8.1	ERP Measurement	Pass
2.1055, 27.54	8.2	Frequency Stability v.s. temperature measurement	Pass
2.1049	8.3	Occupied Bandwidth Measurement	Pass
27.50(b)	8.4	Peak to Average Ratio	Pass
27.53(g)	8.5	Conducted Band Edge	Pass
27.53(g)	8.6	Conducted Spurious Emission	Pass
27.53(g)	8.7	Spurious Radiation Measurement	Pass

5. INSTRUMENT CALIBRATION

5.1 MEASURING INSTRUMENT CALIBRATION

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturer's recommendations for utilizing calibration equipment, which is traceable to recognized national standards.

5.2 MEASUREMENT EQUIPMENT USED

Equipment Used for Emissions Measurement

Remark: Each piece of equipment is scheduled for calibration once a year.

3M 966 Chamber Test Site					
Equipment	**Manufacturer**	**Model**	**S/N**	**Cal Date**	**Cal Due**
Band Reject Filters	MICRO TRONICS	BRM 50702	120	02/08/2021	02/07/2022
Bilog Antenna	Sunol Sciences	JB3	A030105	07/24/2020	07/23/2021
Coaxial Cable	HUBER SUHNER	SUCOFLEX 104PEA	20995	02/24/2021	02/23/2022
Coaxial Cable	EMCI	EMC105	190914+327109/4	09/19/2020	09/18/2021
Digital Thermo-Hygro Meter	WISEWIND	1206	D07	01/06/2021	01/05/2022
double Ridged Guide Horn Antenna	ETC	MCTD 1209	DRH13M02003	09/30/2020	09/29/2021
Loop Ant	COM-POWER	AL-130	121051	04/07/2021	04/06/2022
Pre-Amplifier	EMEC	EM330	060609	02/24/2021	02/23/2022
Pre-Amplifier	HP	8449B	3008A00965	12/25/2020	12/24/2021
PSA Series Spectrum Analyzer	Agilent	E4446A	MY46180323	07/24/2020	07/23/2021
Antenna Tower	CCS	CC-A-1F	N/A	N.C.R	N.C.R
Controller	CCS	CC-C-1F	N/A	N.C.R	N.C.R
Turn Table	CCS	CC-T-1F	N/A	N.C.R	N.C.R
Software	e3 6.11-20180413				

3M 966 Chamber Test Site					
Equipment	**Manufacturer**	**Model**	**S/N**	**Cal Date**	**Cal Due**
Radio Communication Analyzer	Anritsu	MT-8820C	6201240043	07/17/2020	07/16/2021
Signal Analyzer	R&S	FSV 40	101073	09/17/2020	09/16/2021
Wideband Radio Communication Tester	R&S	CMW 500	116875	07/19/2020	07/18/2021
Software	e3 6.11-20180413				

RF Conducted Test Site					
Equipment	**Manufacturer**	**Model**	**S/N**	**Cal Date**	**Cal Due**
Coaxial Cable	Woken	WC12	CC001	06/29/2020	06/28/2021
Coaxial Cable	Woken	WC12	CC003	06/29/2020	06/28/2021
Power Divider	Solvang Technology	STI08-0015	008	08/05/2020	08/04/2021
Signal Analyzer	R&S	FSV 40	101561	08/17/2020	08/16/2021
Thermostatic/Humidity Chamber	GWINSTEK	GTC-288MH-CC	TH160402	05/07/2020	05/06/2021
Radio Communication Analyzer	Anritsu	MT-8821C	6201300618	05/27/2020	05/26/2021
Software	N/A				

Remark: Each piece of equipment is scheduled for calibration once a year.

5.3 MEASUREMENT UNCERTAINTY

PARAMETER	UNCERTAINTY
AC Powerline Conducted Emission	+/- 1.2575
Emission bandwidth, 20dB bandwidth	+/- 0.0014
RF output power, conducted	+/- 1.14
Power density, conducted	+/- 1.40
3M Semi Anechoic Chamber / 30M~200M	+/- 4.12
3M Semi Anechoic Chamber / 200M~1000M	+/- 4.68
3M Semi Anechoic Chamber / 1G~8G	+/- 5.18
3M Semi Anechoic Chamber / 8G~18G	+/- 5.47
3M Semi Anechoic Chamber / 18G~26G	+/- 3.81
3M Semi Anechoic Chamber / 26G~40G	+/- 3.87

Remark: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

6. FACILITIES AND ACCREDITATIONS

6.1 FACILITIES

All measurement facilities used to collect the measurement data are located at

☐ No.199, Chunghsen Road, Hsintien City, Taipei Hsien, Taiwan, R.O.C.
Tel: 886-2-2217-0894 / Fax: 886-2-2217-1029

☒ No.11, Wugong 6th Rd., Wugu Dist., New Taipei City 24891, Taiwan. (R.O.C.)
Tel: 886-2-2299-9720 / Fax: 886-2-2299-9721

The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.10: 2013 and CISPR Publication 22.

6.2 EQUIPMENT

Radiated emissions are measured with one or more of the following types of linearly polarized antennas: tuned dipole, biconical, log periodic, bi-log, and/or ridged waveguide, horn. Spectrum analyzers with pre-selectors and quasi-peak detectors are used to perform radiated measurements.

Conducted emissions are measured with Line Impedance Stabilization Networks and EMI Test Receivers.

Calibrated wideband preamplifiers, coaxial cables, and coaxial attenuators are also used for making measurements.

All receiving equipment conforms to CISPR Publication 16-1, “Radio Interference Measuring Apparatus and Measurement Methods.”

7. SETUP OF EQUIPMENT UNDER TEST

7.1 SETUP CONFIGURATION OF EUT

See test photographs attached in Appendix I for the actual connections between EUT and support equipment.

7.2 SUPPORT EQUIPMENT

No	Equipment	Brand	Model	Series No.	FCC ID
1.	DC Power Source	Agilent	E3640A	N/A	N/A

Remark:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

8. TEST PROCEDURE AND RESULT

8.1 ERP MEASUREMENT

LIMIT

According to FCC §2.1046

FCC 27.50 (c) (10): The portable stations (hand-held devices) in the 600MHz uplink band and the 698-746MHz band, and fixed and mobile stations in the 600MHz uplink band are limited to 3 Watts ERP.

TEST PROCEDURES

CONDUCTED POWER MEASUREMENT:

1. The transmitter output power was connected to the call box.
2. Set EUT at maximum output power via call box.
3. Set Call box at lowest, middle and highest channels for each band and modulation.

TEST RESULTS

No non-compliance noted.

TEST RESULTS

Temperature:	22.4℃	**Humidity:**	52.1% RH
Tested by:	Dally Hong	**Test Date:**	April 15, 2021

LTE Band 12

Band	BW (MHz)	Mode	RB Allocation	RB offset	MPR	Max. Meas. Avg Pwr (dBm)			ERP Power(dBm)		
						23017	23095	23173	23017	23095	23173
						699.7 MHz	707.5 MHz	715.3 MHz	699.7 MHz	707.5 MHz	715.3 MHz
LTE Band 12	1.4	QPSK	1	0	0	22.19	21.75	22.11	**24.54**	24.10	24.46
			1	2	0	21.87	21.45	22.10	24.22	23.80	24.45
			1	5	0	21.64	21.44	22.06	23.99	23.79	24.41
			3	0	0	20.97	20.94	21.02	23.32	23.29	23.37
			3	2	0	20.69	20.89	20.88	23.04	23.24	23.23
			3	3	0	20.67	20.69	20.71	23.02	23.04	23.06
			6	0	0	19.81	19.42	19.74	22.16	21.77	22.09
		16QAM	1	0	0	20.97	21.02	21.18	23.32	23.37	23.53
			1	2	0	20.77	20.71	21.06	23.12	23.06	23.41
			1	5	0	20.74	20.50	20.75	23.09	22.85	23.10
			3	0	0	19.86	19.47	19.89	22.21	21.82	22.24
			3	2	0	19.69	19.42	19.82	22.04	21.77	22.17
			3	3	0	19.76	19.31	19.43	22.11	21.66	21.78
			5	0	0	19.75	19.61	19.68	22.10	21.96	22.03

Band	BW (MHz)	Mode	RB Allocation	RB offset	MPR	Max. Meas. Avg Pwr (dBm)			ERP Power(dBm)		
						23025	23095	23165	23025	23095	23165
						700.5 MHz	707.5 MHz	714.5 MHz	700.5 MHz	707.5 MHz	714.5 MHz
LTE Band 12	3	QPSK	1	0	0	21.66	21.39	21.75	24.01	23.74	**24.10**
			1	2	0	21.54	21.40	21.46	23.89	23.75	23.81
			1	5	0	21.23	21.38	21.44	23.58	23.73	23.79
			3	0	1	20.65	20.34	20.58	23.00	22.69	22.93
			3	2	1	20.46	20.27	20.54	22.81	22.62	22.89
			3	3	1	20.35	20.29	20.44	22.70	22.64	22.79
			6	0	1	19.67	19.59	19.53	22.02	21.94	21.88
		16QAM	1	0	1	20.65	20.65	20.77	23.00	23.00	23.12
			1	2	1	20.60	20.64	20.70	22.95	22.99	23.05
			1	5	1	20.55	20.43	20.46	22.90	22.78	22.81
			3	0	2	19.73	19.43	19.61	22.08	21.78	21.96
			3	2	2	19.96	19.39	19.45	22.31	21.74	21.80
			3	3	2	19.51	19.21	19.77	21.86	21.56	22.12
			5	0	2	19.70	19.49	19.78	22.05	21.84	22.13

Band	BW (MHz)	Mode	RB Allocation	RB offset	MPR	Max. Meas. Avg Pwr (dBm)			ERP Power(dBm)		
						23035	23095	23155	23035	23095	23155
						701.5 MHz	707.5 MHz	713.5 MHz	701.5 MHz	707.5 MHz	713.5 MHz
LTE Band 12	5	QPSK	1	0	0	21.53	21.55	21.52	23.88	23.90	23.87
			1	2	0	21.47	21.52	21.44	23.82	23.87	23.79
			1	5	0	21.14	21.24	21.34	23.49	23.59	23.69
			3	0	0	21.56	21.51	21.49	23.91	23.86	23.84
			3	2	0	21.52	21.38	21.59	23.87	23.73	23.94
			3	3	0	21.29	21.30	21.26	23.64	23.65	23.61
			6	0	0	20.57	20.41	20.55	22.92	22.76	22.90
		16QAM	1	0	0	21.73	21.80	21.78	24.08	**24.15**	24.13
			1	2	0	21.66	21.75	21.61	24.01	24.10	23.96
			1	5	0	21.52	21.40	21.53	23.87	23.75	23.88
			3	0	0	21.66	21.67	21.56	24.01	24.02	23.91
			3	2	0	21.61	21.62	21.50	23.96	23.97	23.85
			3	3	0	21.51	21.52	21.54	23.86	23.87	23.89
			5	0	0	20.75	20.72	20.65	23.10	23.07	23.00

Band	BW (MHz)	Mode	RB Allocation	RB offset	MPR	Max. Meas. Avg Pwr (dBm)			ERP Power(dBm)		
						23060	23095	23130	23060	23095	23130
						704 MHz	707.5 MHz	711 MHz	704 MHz	707.5 MHz	711 MHz
LTE Band 12	10	QPSK	1	0	0	21.55	21.53	21.48	23.90	23.88	23.83
			1	2	0	21.46	21.37	21.45	23.81	23.72	23.80
			1	5	0	21.29	21.28	21.28	23.64	23.63	23.63
			3	0	0	21.46	21.45	21.46	23.81	23.80	23.81
			3	2	0	21.42	21.40	21.42	23.77	23.75	23.77
			3	3	0	21.34	21.33	21.34	23.69	23.68	23.69
			6	0	0	20.54	20.46	20.46	22.89	22.81	22.81
		16QAM	1	0	0	21.64	21.66	21.79	23.99	24.01	**24.14**
			1	2	0	21.47	21.55	21.63	23.82	23.90	23.98
			1	5	0	21.37	21.36	21.58	23.72	23.71	23.93
			3	0	0	21.49	21.57	21.66	23.84	23.92	24.01
			3	2	0	21.47	21.55	21.60	23.82	23.90	23.95
			3	3	0	21.39	21.47	21.53	23.74	23.82	23.88
			5	0	0	21.77	21.49	21.55	24.12	23.84	23.90

8.2 FREQUENCY STABILITY MEASUREMENT

LIMIT

According to the FCC part 27.54 shall be tested the frequency stability. The rule is defined that" The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

TEST PROCEDURE

Use Anritsu 8821 with frequency Error measurement capability.
Temp = -20 to +50℃
Voltage= 85% to 115% of the nominal value for AC powered equipment.

NOTE: The frequency error was recorded frequency error from the communication simulator.

TEST RESULTS

Temperature: 22.4℃ **Humidity:** 52.1% RH

Tested by: Dally Hong **Test Date:** April 15, 2021

FREQUENCY STABILITY V.S. TEMPERATURE MEASUREMENT:

Band2_10M_QPSK_Full RB																									
Channel	23060	23095	23130	23060	23095	23130	23060	23095	23130	23060	23095	23130	23060	23095	23130	23060	23095	23130	23060	23095	23130	23060	23095	23130	
Freq. (MHz)	704	707.5	711	704	707.5	711	704	707.5	711	704	707.5	711	704	707.5	711	704	707.5	711	704	707.5	711	704	707.5	711	
Test Time	0 Minutes			2 Minutes			5 Minutes			10 Minutes			0 Minutes			2 Minutes			5 Minutes			10 Minutes			
Temp.	Deviation																								Limit
(℃)	(Hz)												(ppm)												
-20	7.4	8.1	-6.5	-4.3	-7.7	-1.8	-6.5	4.7	5.9	9.6	4.5	-3.7	0.011	0.011	-0.009	-0.006	-0.011	-0.003	-0.009	0.007	0.008	0.014	0.006	-0.005	0.1
-10	-3.9	4.4	3.8	-7.5	6.7	8.1	9.5	6.8	4.8	7.4	9.5	4.5	-0.006	0.006	0.005	-0.011	0.009	0.011	0.013	0.010	0.007	0.011	0.013	0.006	0.1
0	4.5	8.2	-6.6	5.9	7.4	4.5	7.4	2.9	5.5	7.5	4.9	-5.5	0.006	0.012	-0.009	0.008	0.010	0.006	0.011	0.004	0.008	0.011	0.007	-0.008	0.1
10	4.2	7.0	-5.8	3.9	-2.2	1.8	4.9	-3.7	4.0	5.8	1.9	1.5	0.006	0.010	-0.008	0.006	-0.003	0.003	0.007	-0.005	0.006	0.008	0.003	0.002	0.1
20	6.5	-4.1	5.8	2.1	4.6	8.4	-2.4	-8.5	6.7	14.9	8.2	8.0	0.009	-0.006	0.008	0.003	0.007	0.012	-0.003	-0.012	0.009	0.021	0.012	0.011	0.1
30	11.4	-2.5	8.4	6.1	5.8	4.2	-6.5	0.4	8.2	6.1	-5.9	7.4	0.016	-0.004	0.012	0.009	0.008	0.006	-0.009	0.001	0.012	0.009	-0.008	0.010	0.1
40	8.3	6.5	9.9	5.8	-4.1	2.8	6.4	5.5	1.6	-2.8	15.6	13.9	0.012	0.009	0.014	0.008	-0.006	0.004	0.009	0.008	0.002	-0.004	0.022	0.020	0.1
50	14.5	9.4	10.4	8.2	-5.7	5.8	9.5	-12.5	7.1	8.0	13.3	6.7	0.021	0.013	0.015	0.012	-0.008	0.008	0.013	-0.018	0.010	0.011	0.019	0.009	0.1

FREQUENCY STABILITY V.S. VOLTAGE MEASUREMENT:

Band2_10M_QPSK_Full RB																									
Channel	23060	23095	23130	23060	23095	23130	23060	23095	23130	23060	23095	23130	23060	23095	23130	23060	23095	23130	23060	23095	23130	23060	23095	23130	
Freq. (MHz)	704	707.5	711	704	707.5	711	704	707.5	711	704	707.5	711	704	707.5	711	704	707.5	711	704	707.5	711	704	707.5	711	
Test Time	0 Minutes			2 Minutes			5 Minutes			10 Minutes			0 Minutes			2 Minutes			5 Minutes			10 Minutes			
Voltage	Deviation																								Limit
[V]	(Hz)												(ppm)												
5.75	4.7	6.2	5.9	4.0	2.4	5.8	-6.4	8.5	10.1	17.5	9.4	8.2	0.007	0.009	0.008	0.006	0.003	0.008	-0.009	0.012	0.014	0.025	0.013	0.012	0.1
5	5.6	2.1	5.1	2.3	4.5	1.8	-5.5	13.8	7.2	3.5	4.9	4.2	0.008	0.003	0.007	0.003	0.006	0.003	-0.008	0.020	0.010	0.005	0.007	0.006	0.1
4.25	9.9	3.3	-2.8	14.5	6.0	9.5	8.2	6.4	11.1	1.9	-4.7	6.1	0.014	0.005	-0.004	0.021	0.008	0.013	0.012	0.009	0.016	0.003	-0.007	0.009	0.1

8.3 OCCUPIED BANDWIDTH MEASUREMENT

LIMITS

The width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5 % of the total mean power of a given emission.

TEST PROCEDURES

KDB 971168 D01 Power Meas License Digital Systems – Section 4.2

1. The occupied bandwidth was measured with the spectrum analyzer at the lowest, middle and highest channels in each band and different modulation. The 99% and -26dB bandwidth was measured and recorded.
2. RBW = 1-5% of the expected OBW
3. VBW ≥ 3 x RBW
4. Detector = Peak
5. Trace mode = max. hold

TEST RESULTS

Temperature: 22.4℃ **Humidity:** 52.1% RH

Tested by: Dally Hong **Test Date:** April 15, 2021

LTE Band 12

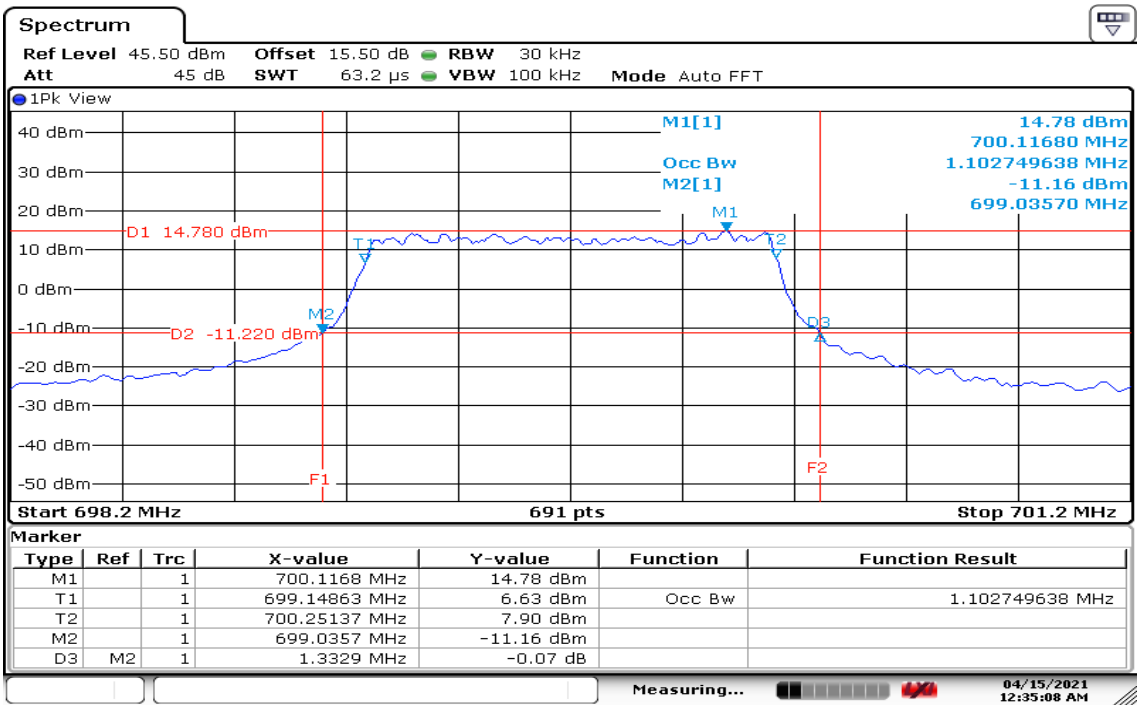
Frequency (MHz)	Channel	99%BW(MHz)		26dB BW(MHz)	
		QPSK	16QAM	QPSK	16QAM
Band 12 Channel Bandwidth 1.4MHz					
699.7	23017	1.1027	0.9334	1.3329	1.1291
707.5	23095	1.1027	0.9291	1.3372	1.1282
715.3	23173	1.1027	0.9291	1.3242	1.1158
Band 12 Channel Bandwidth 3MHz					
700.5	23025	1.0984	0.9334	1.3111	1.1331
707.5	23095	1.0984	0.9334	1.3025	1.1331
714.5	23165	1.1027	0.9291	1.3198	1.1375
Band 12 Channel Bandwidth 5MHz					
701.5	23035	1.0984	0.9334	1.3329	1.1592
707.5	23095	1.0984	0.9378	1.3329	1.1635
713.5	23155	1.0984	0.9204	1.3329	1.0593
Band 12 Channel Bandwidth 10MHz					
704	23060	1.0941	0.9378	1.3285	1.1462
707.5	23095	1.0941	0.9334	1.3719	1.1462
711	23130	1.0941	0.9334	1.3155	1.1462

LTE Band 12

26dB & OBW (99%) / QPSK

BW: 1.4MHz

CH Low



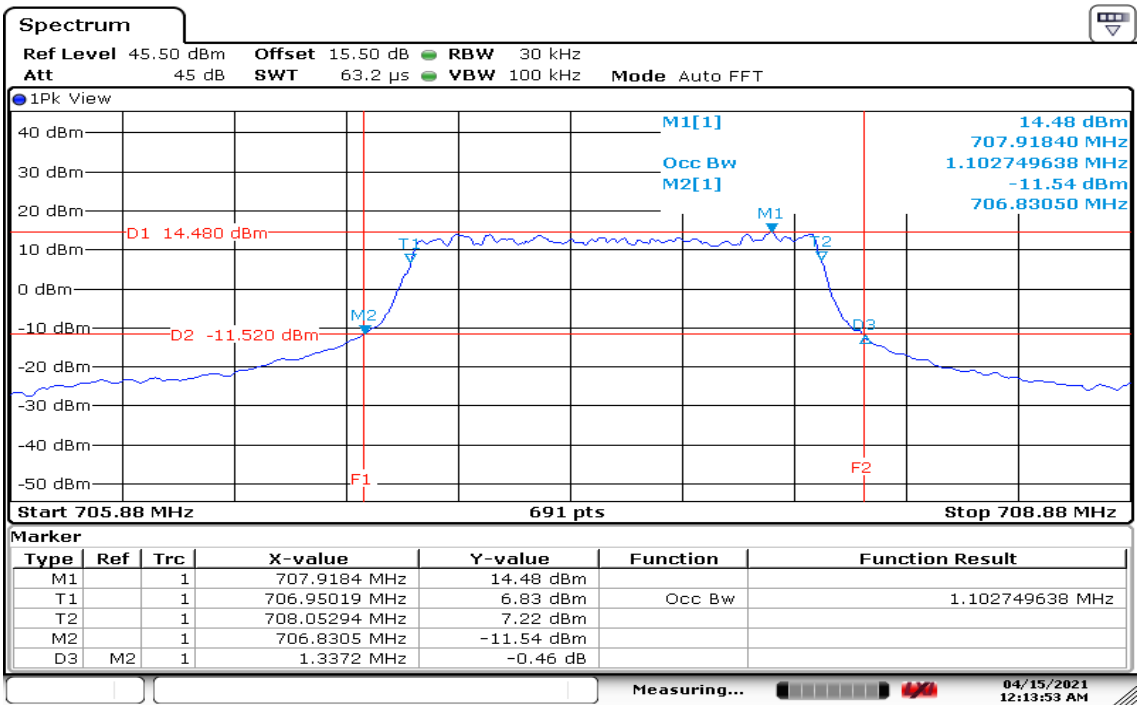
Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	700.1168 MHz	14.78 dBm		
T1		1	699.14863 MHz	6.63 dBm	Occ Bw	1.102749638 MHz
T2		1	700.25137 MHz	7.90 dBm		
M2		1	699.0357 MHz	-11.16 dBm		
D3	M2	1	1.3329 MHz	-0.07 dB		

Measuring... 04/15/2021 12:35:08 AM

Date: 15.APR.2021 00:35:08

CH Mid



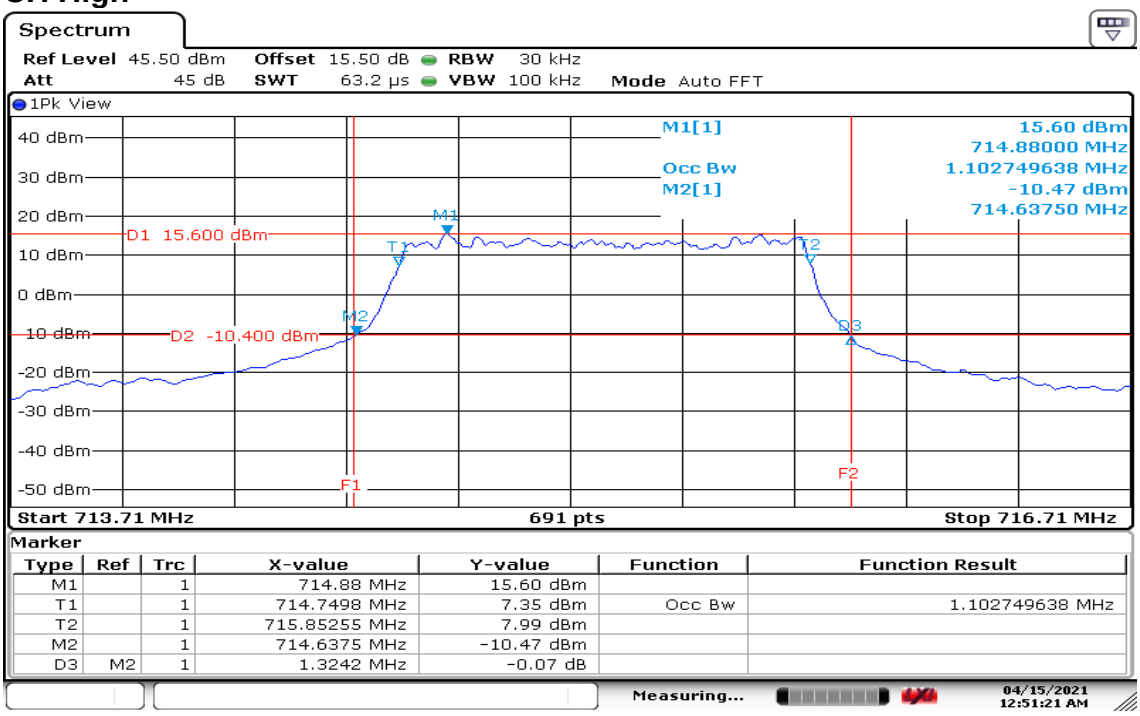
Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	707.9184 MHz	14.48 dBm		
T1		1	706.95019 MHz	6.83 dBm	Occ Bw	1.102749638 MHz
T2		1	708.05294 MHz	7.22 dBm		
M2		1	706.8305 MHz	-11.54 dBm		
D3	M2	1	1.3372 MHz	-0.46 dB		

Measuring... 04/15/2021 12:13:53 AM

Date: 15.APR.2021 00:13:54

CH High

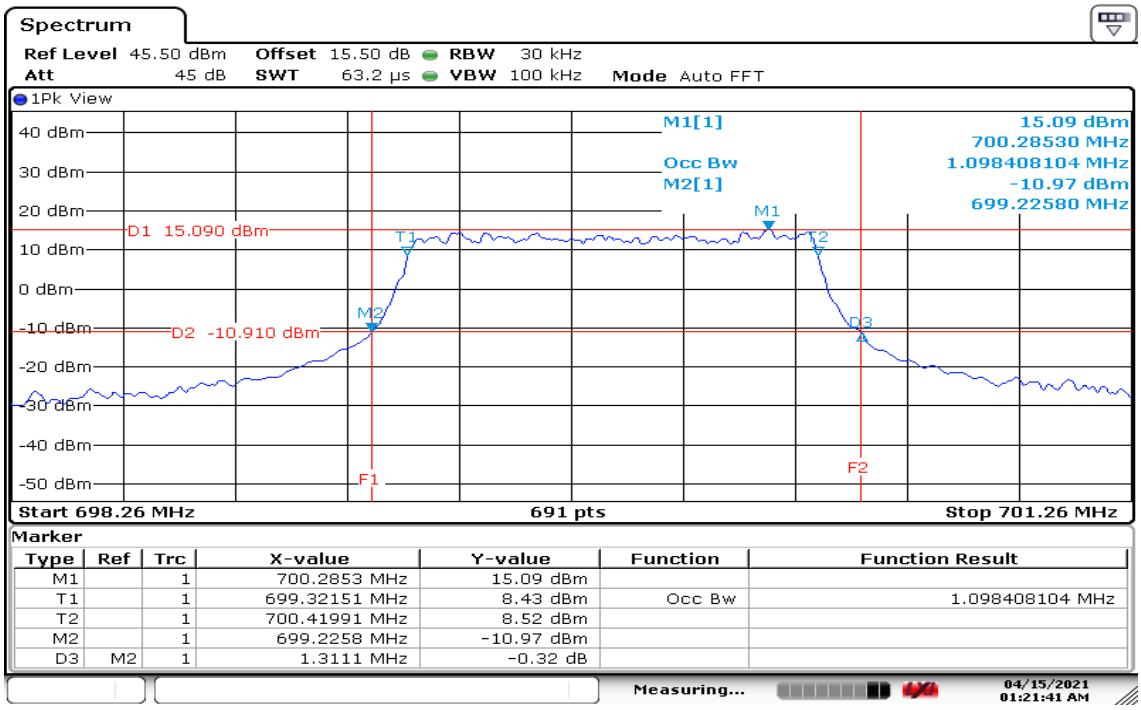


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	714.88 MHz	15.60 dBm		
T1		1	714.7498 MHz	7.35 dBm	Occ Bw	1.102749638 MHz
T2		1	715.85255 MHz	7.99 dBm		
M2		1	714.6375 MHz	-10.47 dBm		
D3	M2	1	1.3242 MHz	-0.07 dB		

Date: 15.APR.2021 00:51:21

BW: 3MHz
CH Low

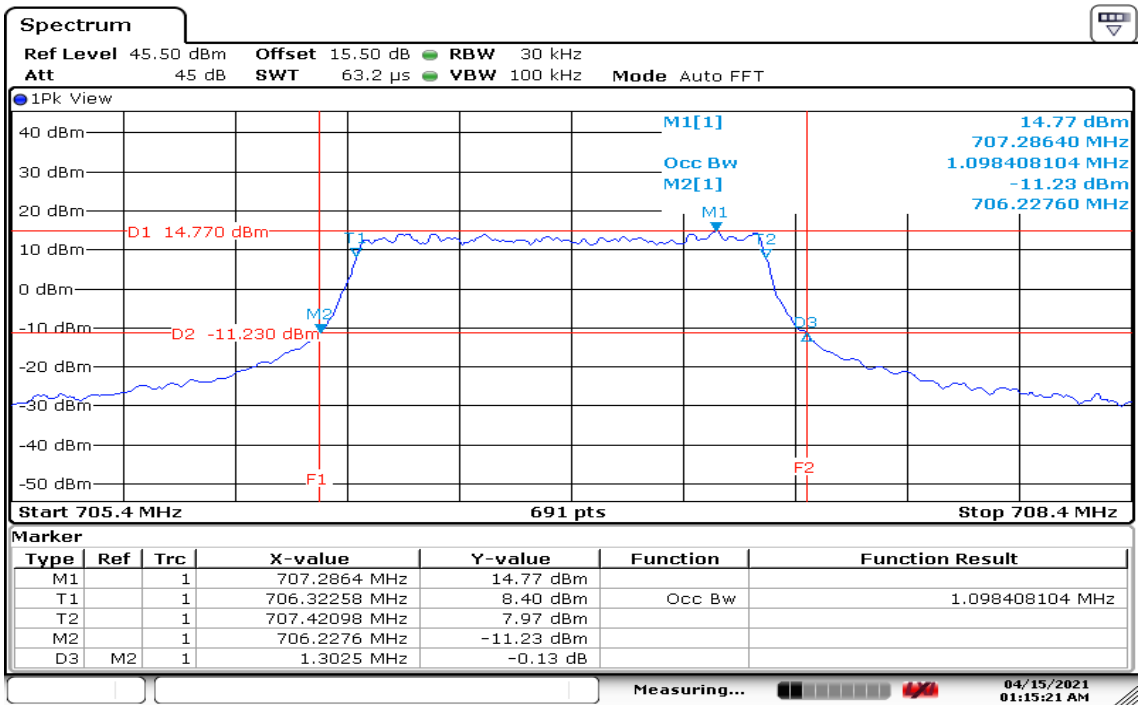


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	700.2853 MHz	15.09 dBm		
T1		1	699.32151 MHz	8.43 dBm	Occ Bw	1.098408104 MHz
T2		1	700.41991 MHz	8.52 dBm		
M2		1	699.2258 MHz	-10.97 dBm		
D3	M2	1	1.3111 MHz	-0.32 dB		

Date: 15.APR.2021 01:21:42

CH Mid

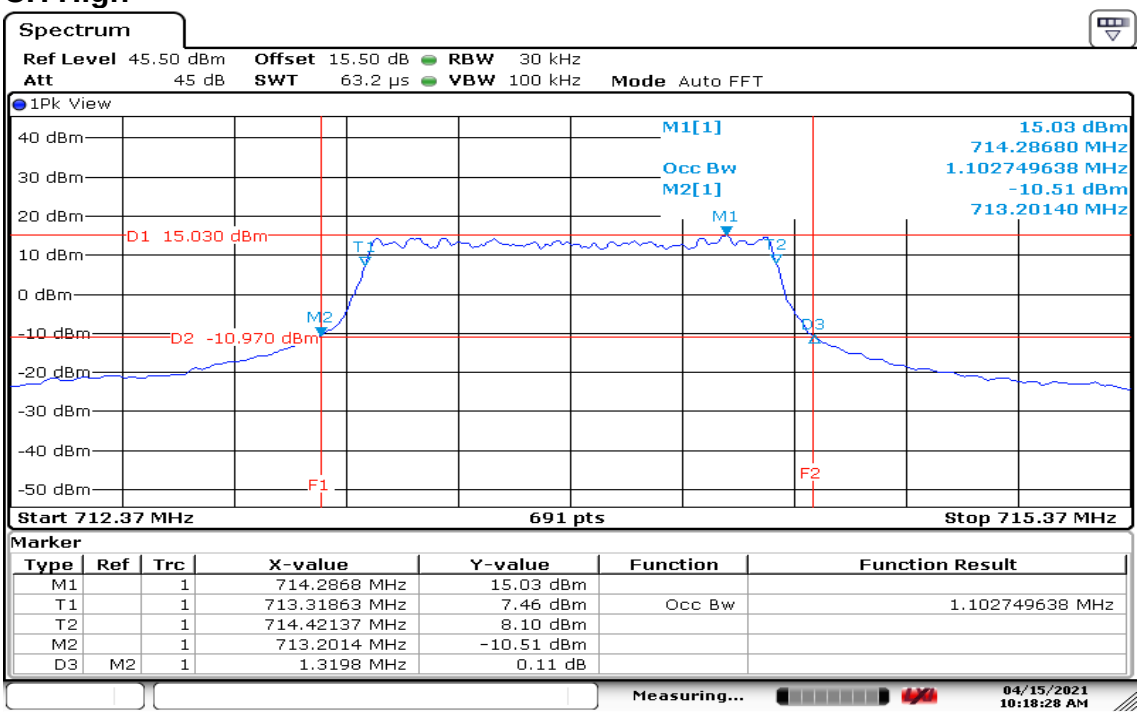


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	707.2864 MHz	14.77 dBm		
T1		1	706.32258 MHz	8.40 dBm	Occ Bw	1.098408104 MHz
T2		1	707.42098 MHz	7.97 dBm		
M2		1	706.2276 MHz	-11.23 dBm		
D3	M2	1	1.3025 MHz	-0.13 dB		

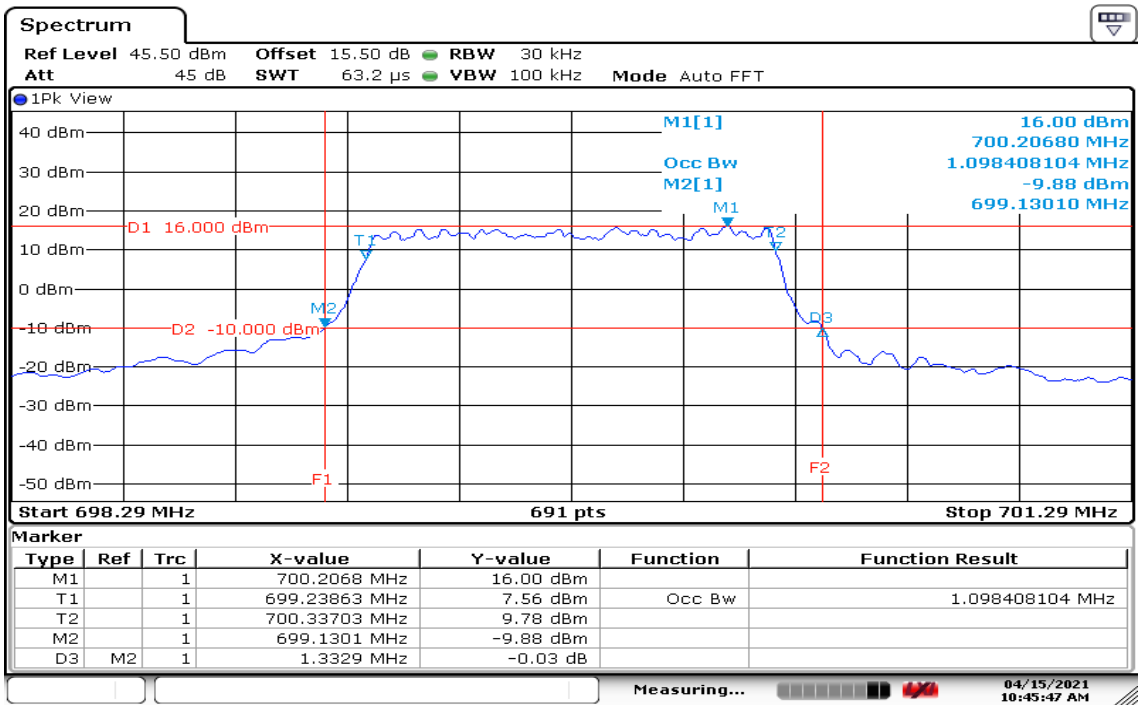
Date: 15.APR.2021 01:15:21

CH High



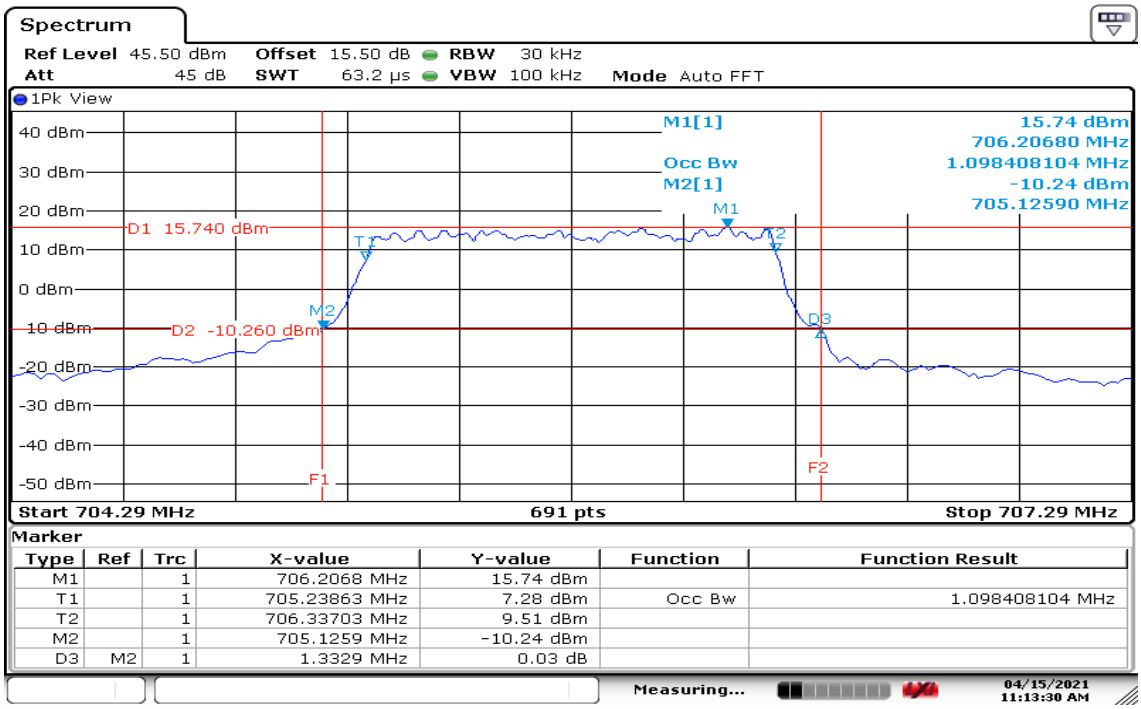
Date: 15.APR.2021 10:18:28

BW: 5MHz
CH Low



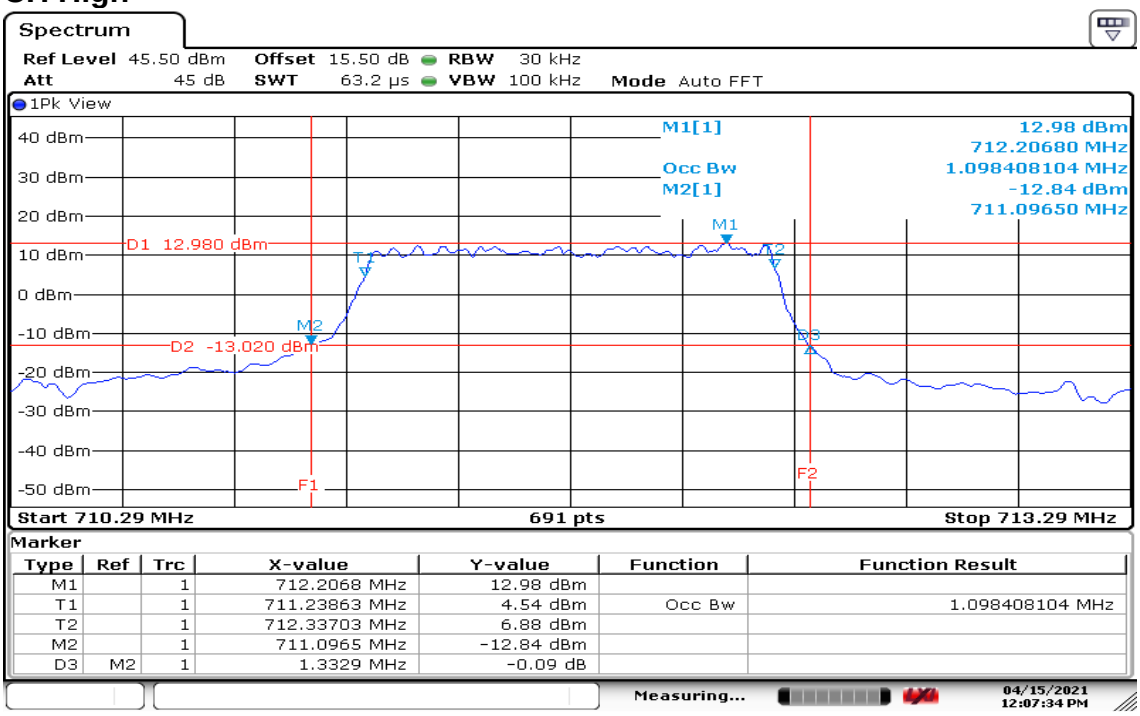
Date: 15.APR.2021 10:45:47

CH Mid



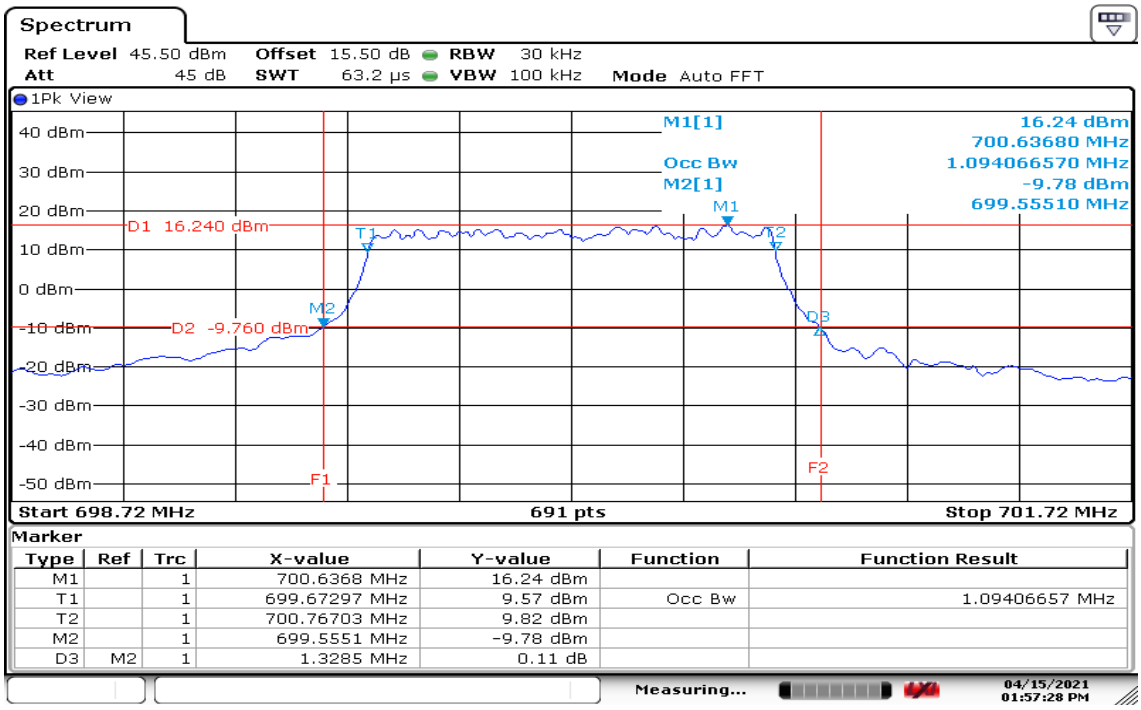
Date: 15.APR.2021 11:13:30

CH High



Date:15.APR.2021 12:07:34

BW: 10MHz
CH Low

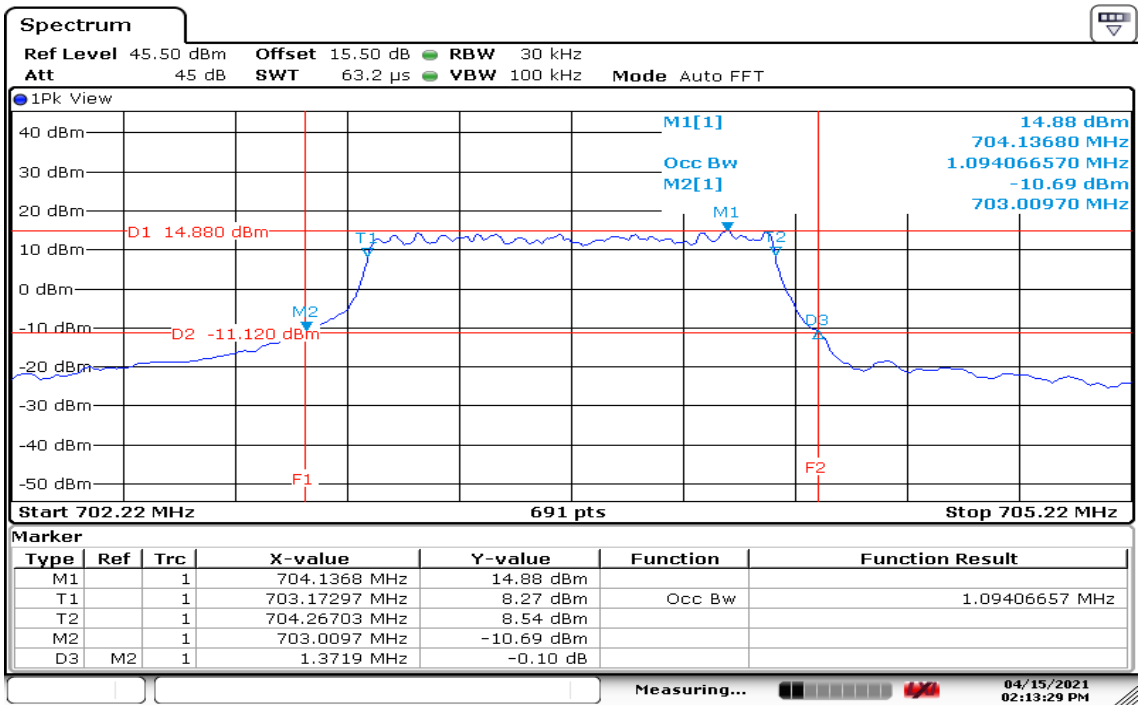


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	700.6368 MHz	16.24 dBm		
T1		1	699.67297 MHz	9.57 dBm	Occ Bw	1.09406657 MHz
T2		1	700.76703 MHz	9.82 dBm		
M2		1	699.5551 MHz	-9.78 dBm		
D3	M2	1	1.3285 MHz	0.11 dB		

Date: 15.APR.2021 13:57:29

CH Mid

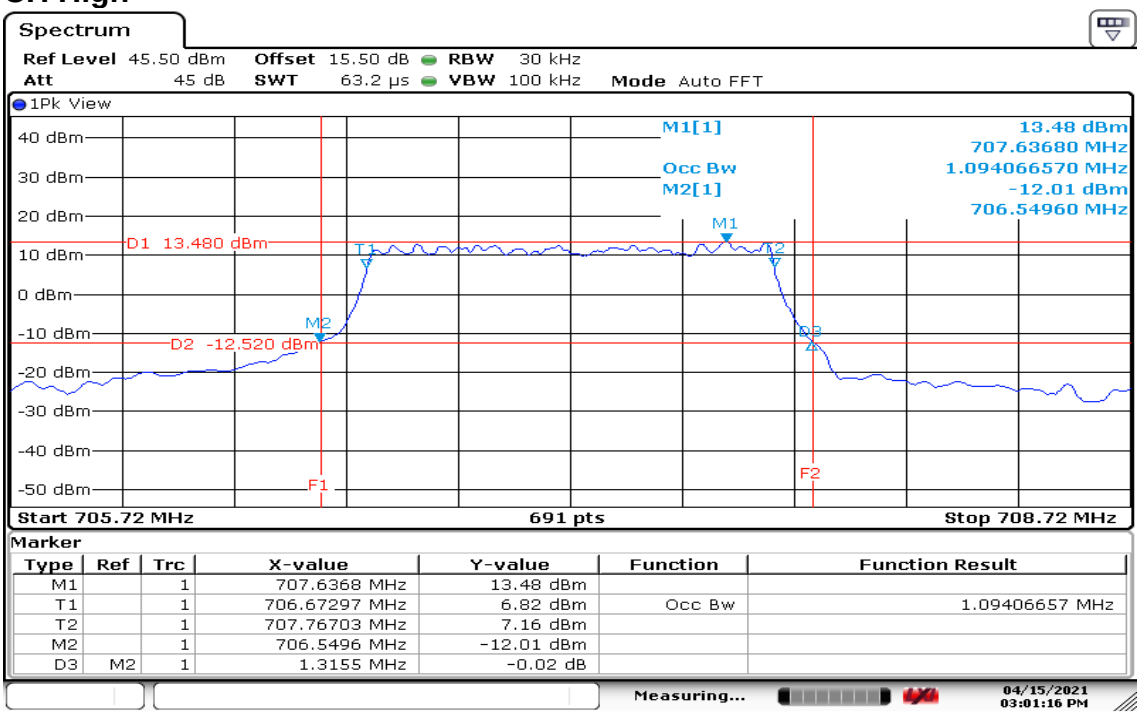


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	704.1368 MHz	14.88 dBm		
T1		1	703.17297 MHz	8.27 dBm	Occ Bw	1.09406657 MHz
T2		1	704.26703 MHz	8.54 dBm		
M2		1	703.0097 MHz	-10.69 dBm		
D3	M2	1	1.3719 MHz	-0.10 dB		

Date: 15.APR.2021 14:13:29

CH High

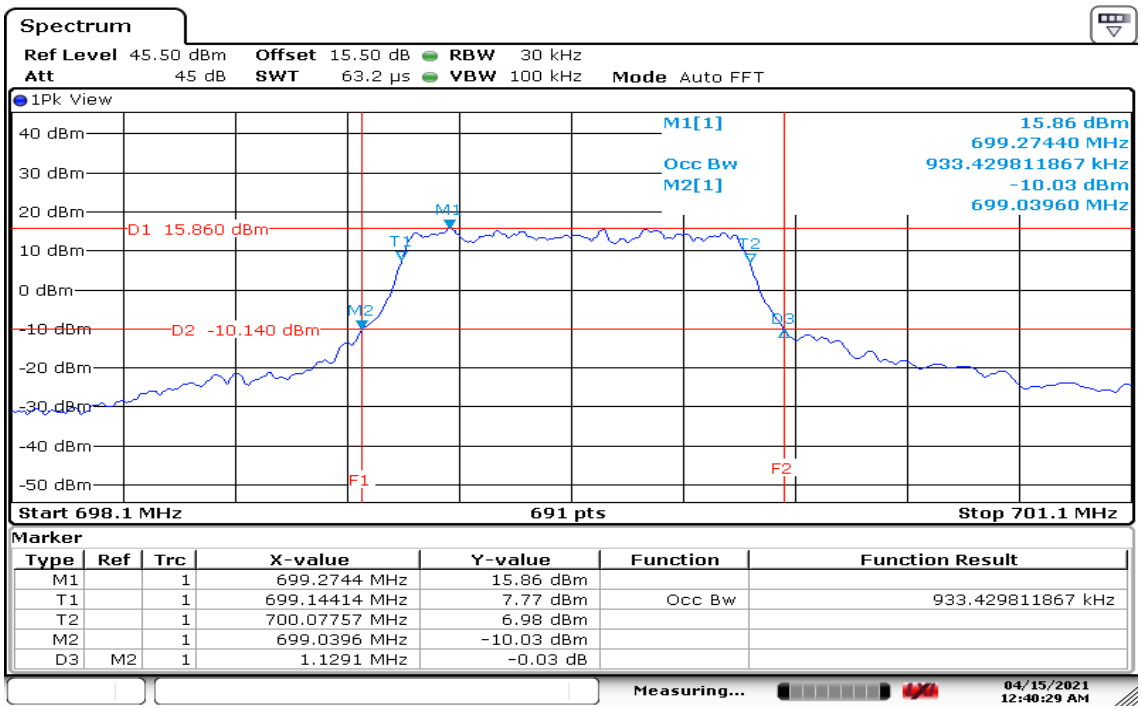


Date:15.APR.2021 15:01:17

26dB & OBW (99%) / 16QAM

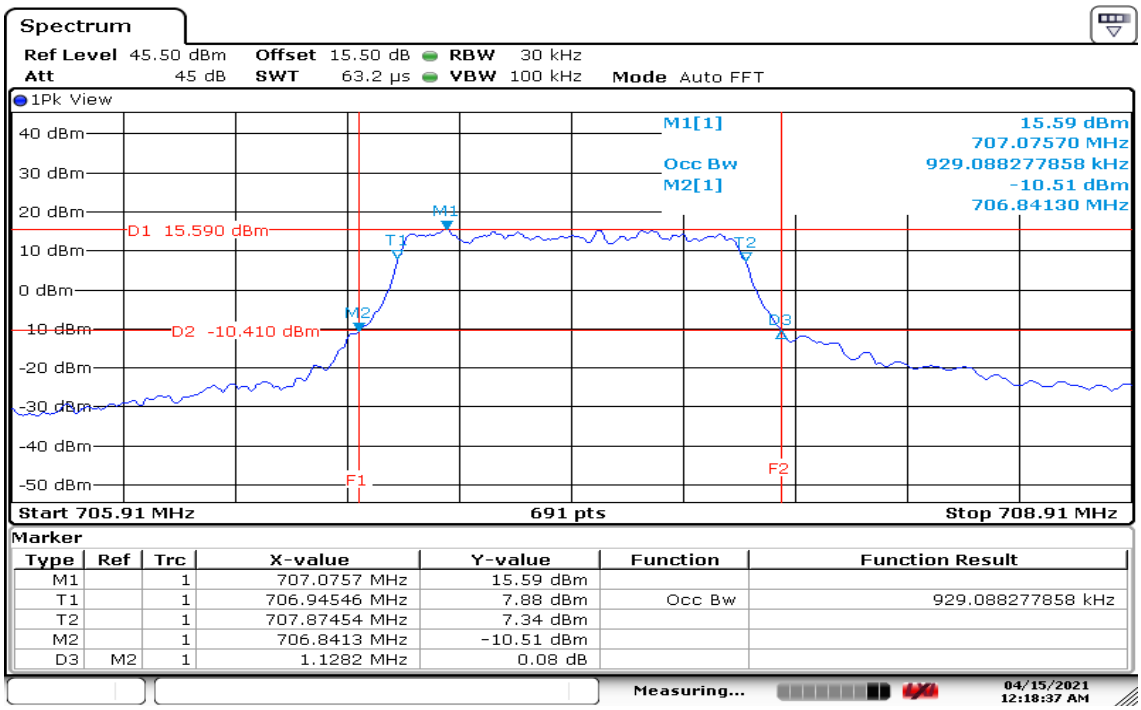
BW: 1.4MHz

CH Low



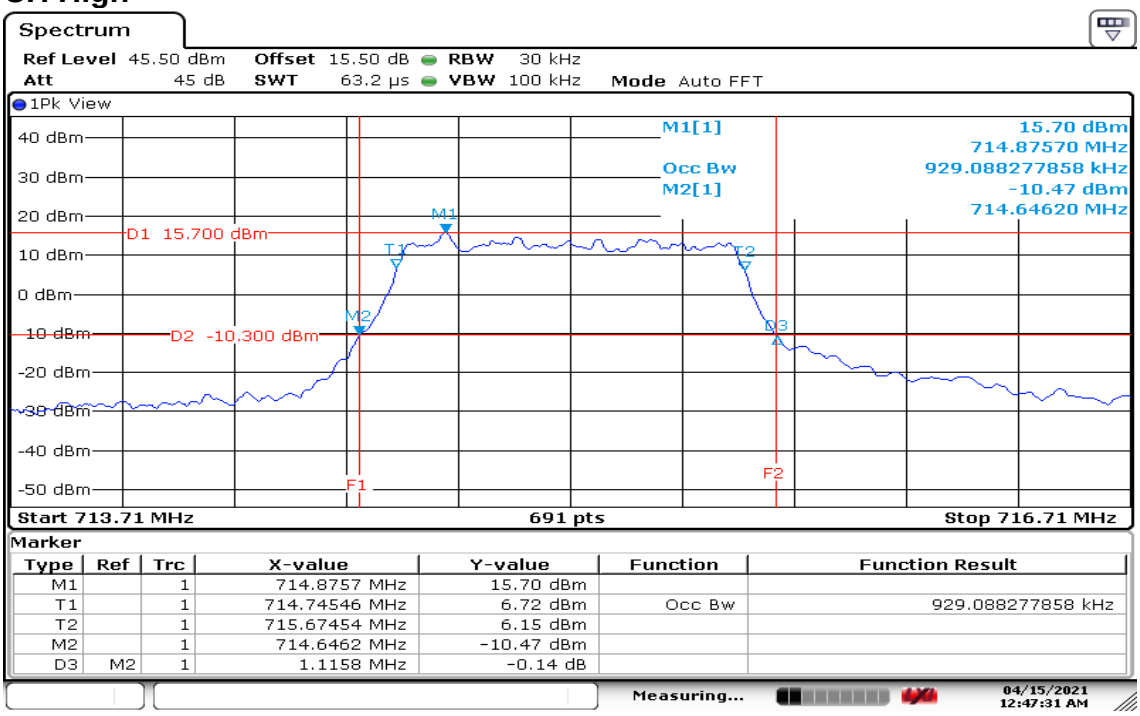
Date: 15.APR.2021 00:40:29

CH Mid



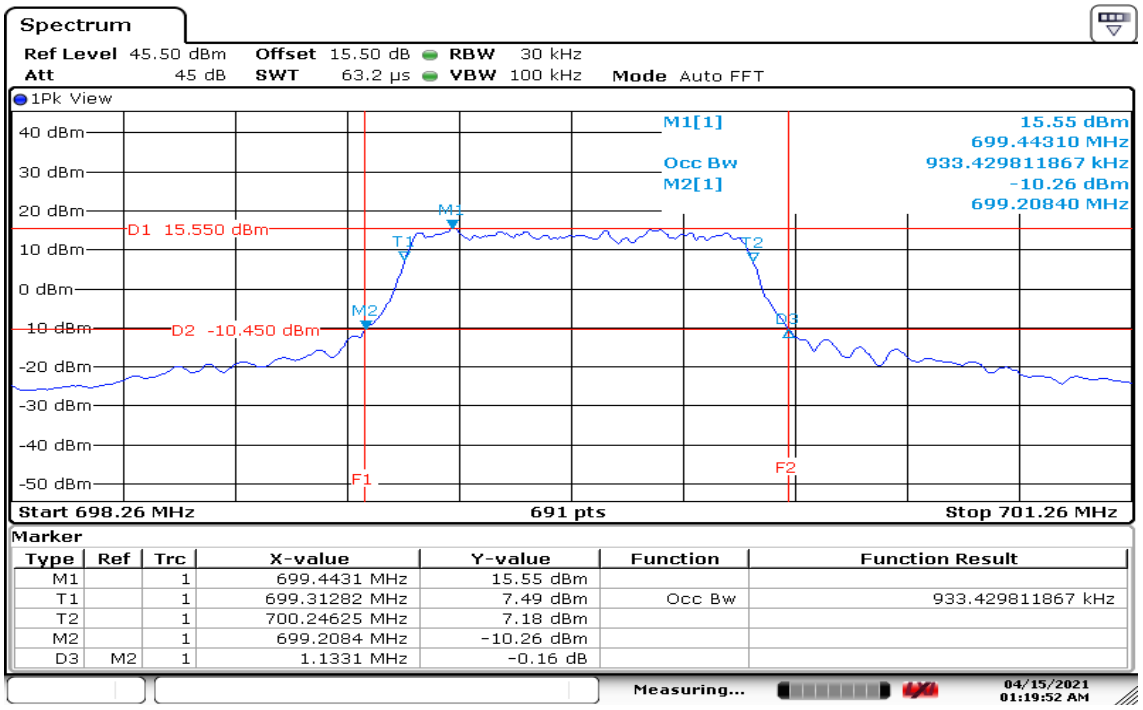
Date: 15.APR.2021 00:18:38

CH High



Date:15.APR.2021 00:47:32

BW: 3MHz
CH Low

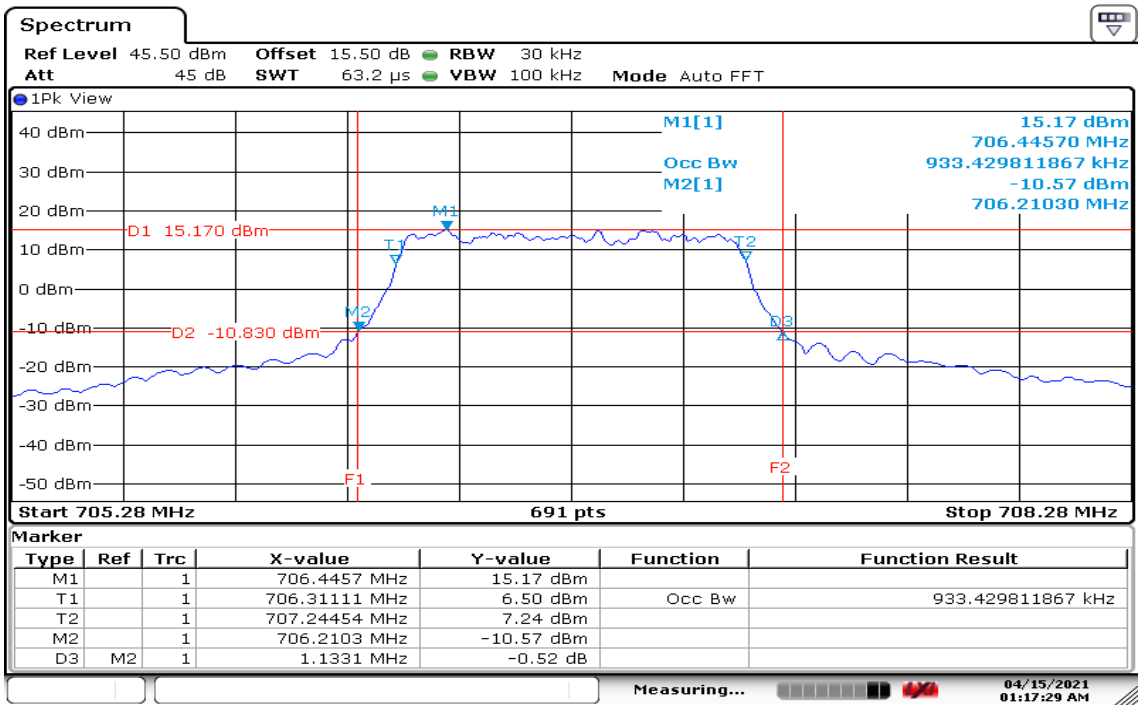


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	699.4431 MHz	15.55 dBm		
T1		1	699.31282 MHz	7.49 dBm	Occ Bw	933.429811867 kHz
T2		1	700.24625 MHz	7.18 dBm		
M2		1	699.2084 MHz	-10.26 dBm		
D3	M2	1	1.1331 MHz	-0.16 dB		

Date: 15.APR.2021 01:19:52

CH Mid

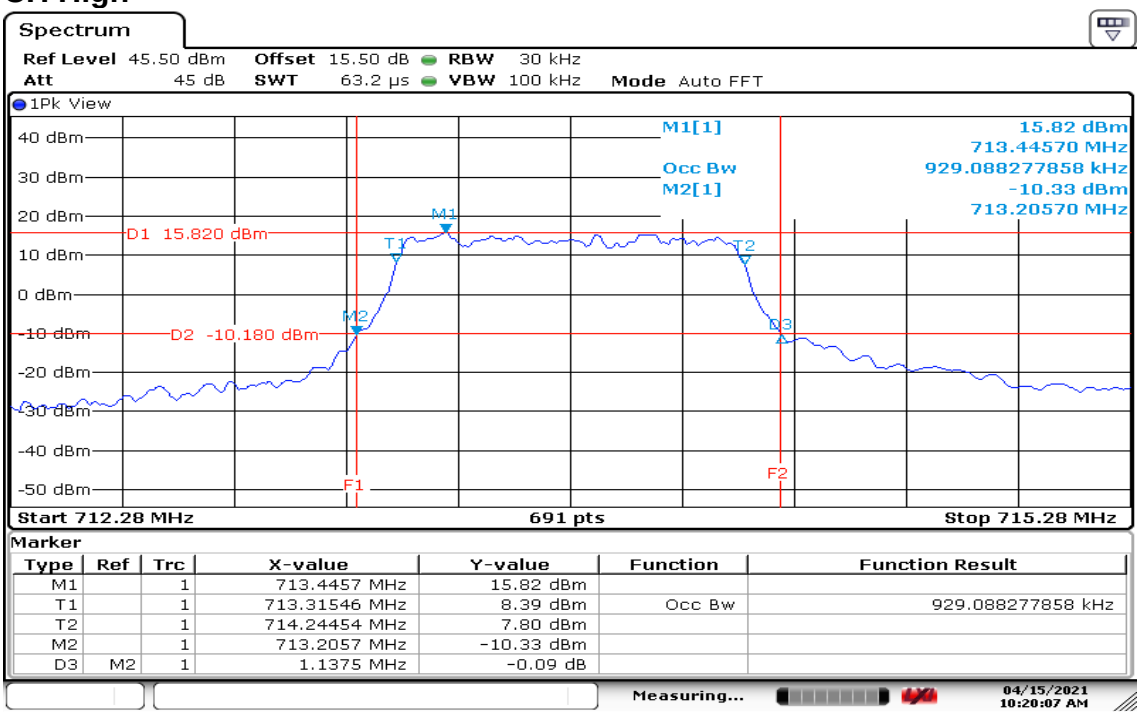


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	706.4457 MHz	15.17 dBm		
T1		1	706.31111 MHz	6.50 dBm	Occ Bw	933.429811867 kHz
T2		1	707.24454 MHz	7.24 dBm		
M2		1	706.2103 MHz	-10.57 dBm		
D3	M2	1	1.1331 MHz	-0.52 dB		

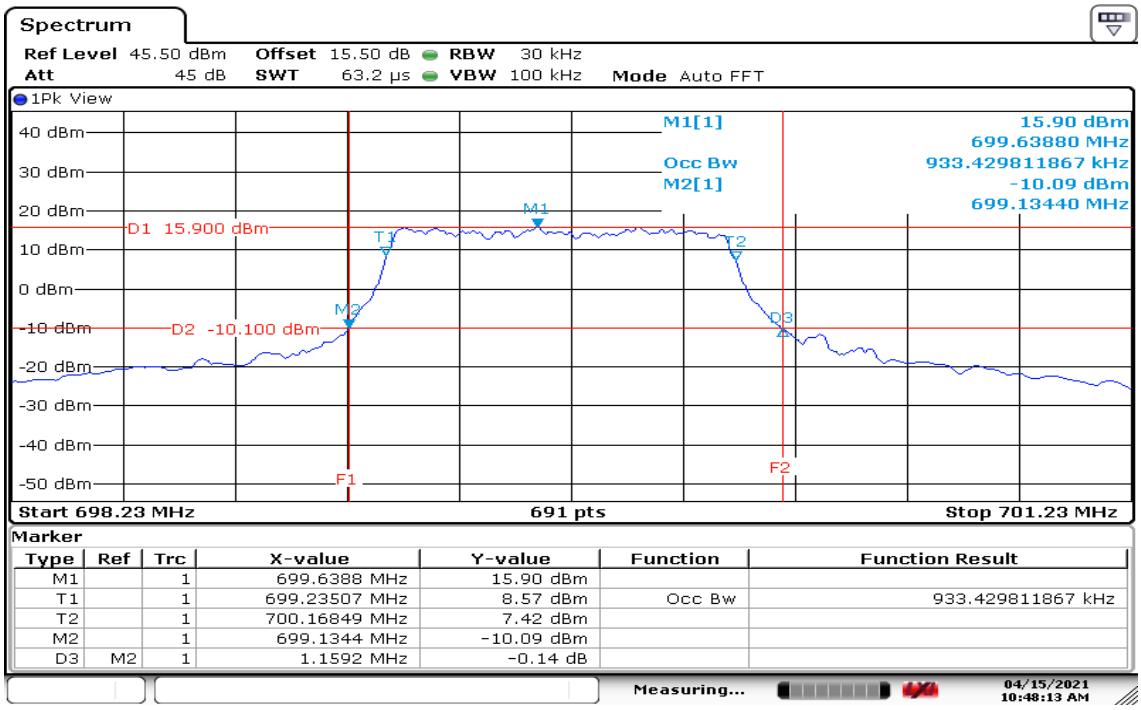
Date: 15.APR.2021 01:17:30

CH High



Date:15.APR.2021 10:20:07

BW: 5MHz
CH Low

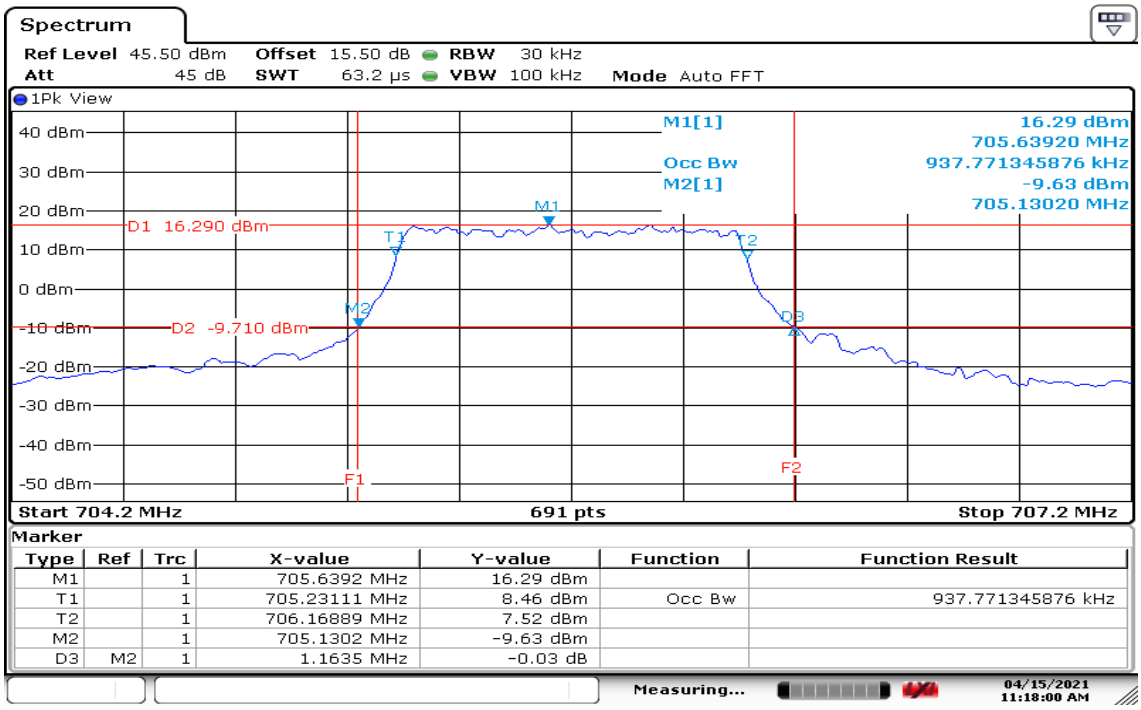


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	699.6388 MHz	15.90 dBm		
T1		1	699.23507 MHz	8.57 dBm	Occ Bw	933.429811867 kHz
T2		1	700.16849 MHz	7.42 dBm		
M2		1	699.1344 MHz	-10.09 dBm		
D3	M2	1	1.1592 MHz	-0.14 dB		

Date: 15.APR.2021 10:48:13

CH Mid

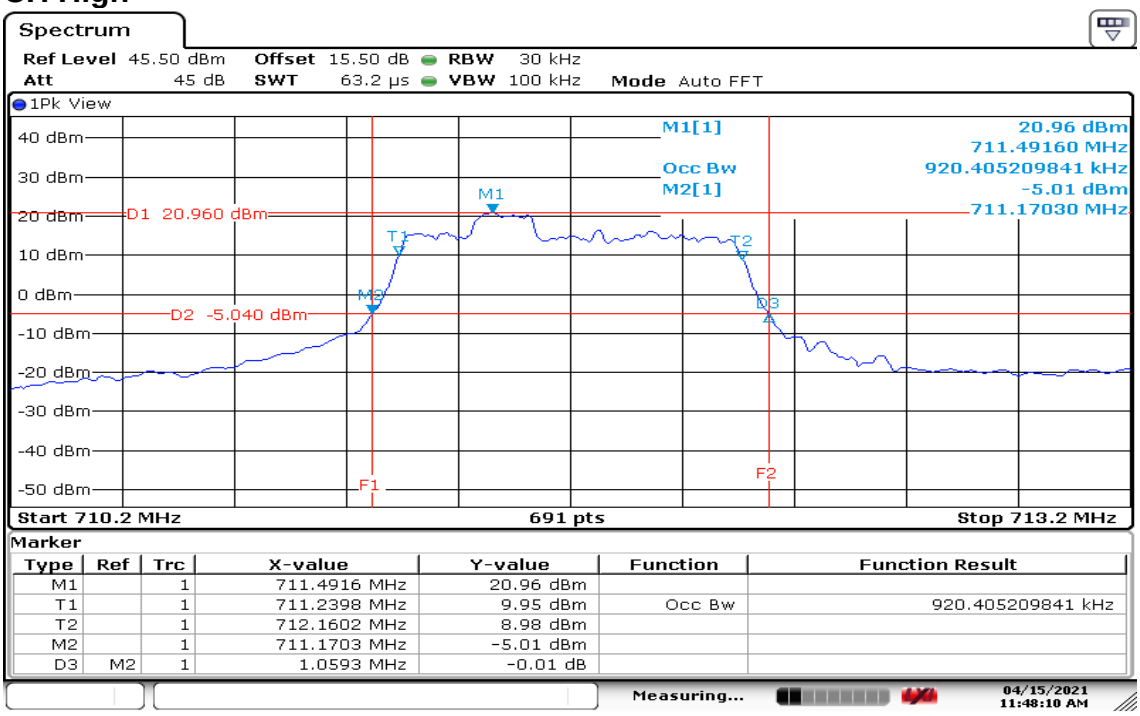


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	705.6392 MHz	16.29 dBm		
T1		1	705.23111 MHz	8.46 dBm	Occ Bw	937.771345876 kHz
T2		1	706.16889 MHz	7.52 dBm		
M2		1	705.1302 MHz	-9.63 dBm		
D3	M2	1	1.1635 MHz	-0.03 dB		

Date: 15.APR.2021 11:18:00

CH High

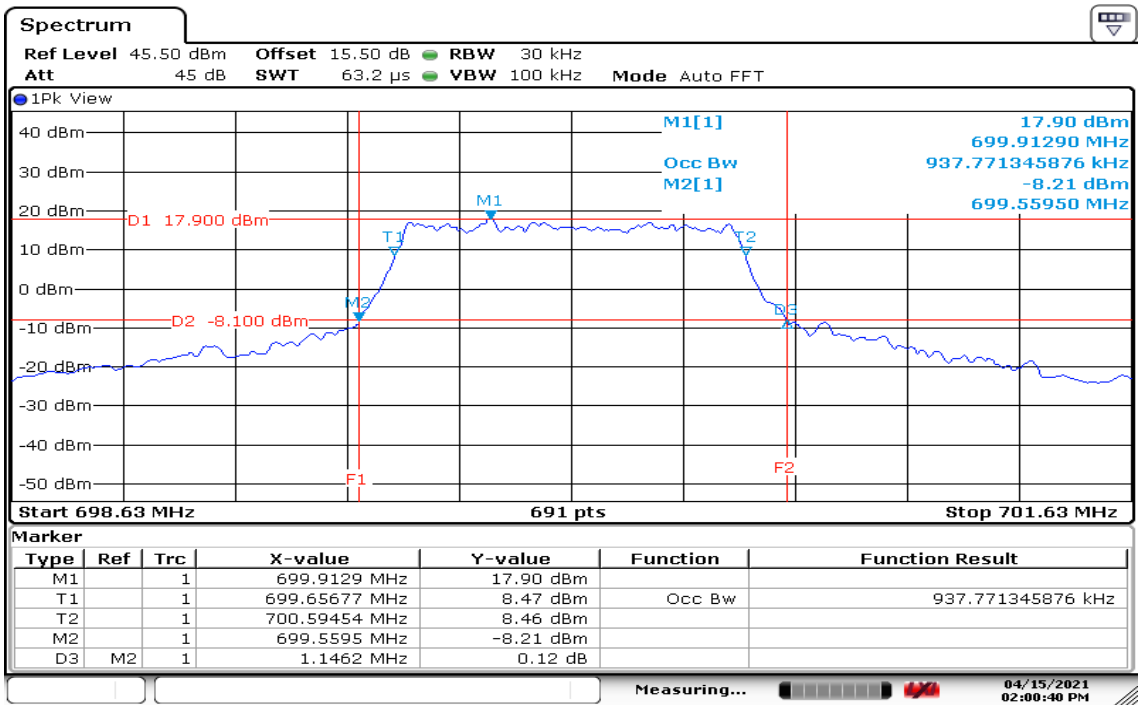


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	711.4916 MHz	20.96 dBm		
T1		1	711.2398 MHz	9.95 dBm	Occ Bw	920.405209841 kHz
T2		1	712.1602 MHz	8.98 dBm		
M2		1	711.1703 MHz	-5.01 dBm		
D3	M2	1	1.0593 MHz	-0.01 dB		

Date: 15.APR.2021 11:48:10

BW: 10MHz
CH Low



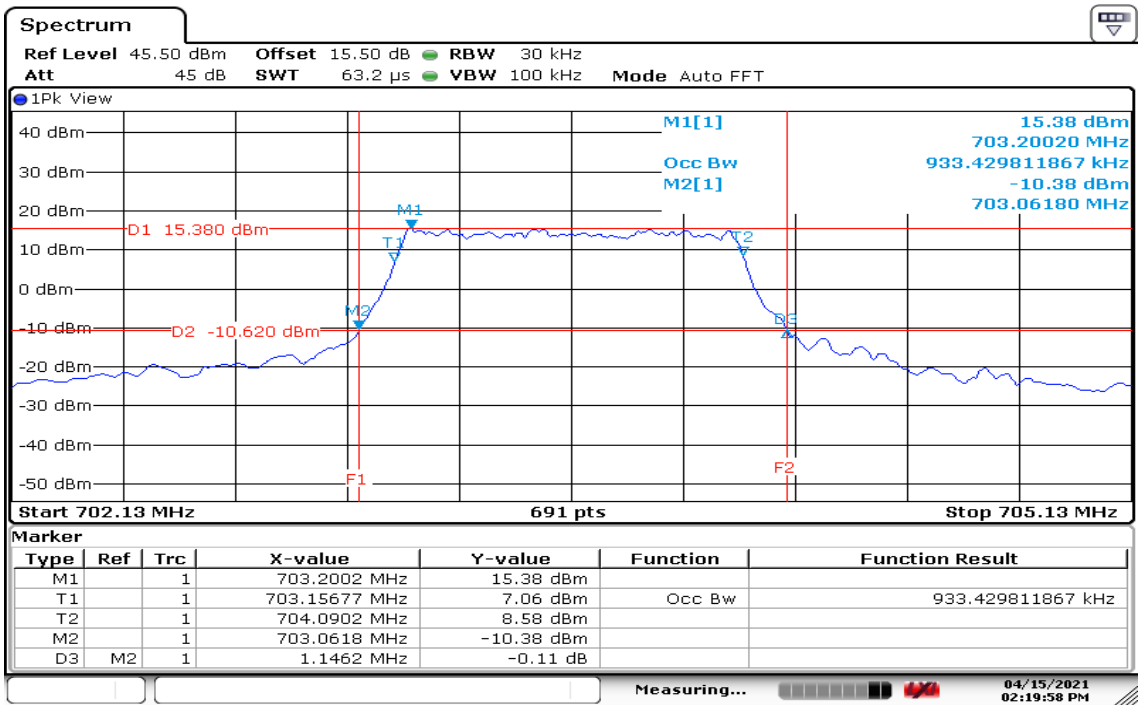
Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	699.9129 MHz	17.90 dBm		
T1		1	699.65677 MHz	8.47 dBm	Occ Bw	937.771345876 kHz
T2		1	700.59454 MHz	8.46 dBm		
M2		1	699.5595 MHz	-8.21 dBm		
D3	M2	1	1.1462 MHz	0.12 dB		

Measuring... 04/15/2021 02:00:40 PM

Date: 15.APR.2021 14:00:41

CH Mid



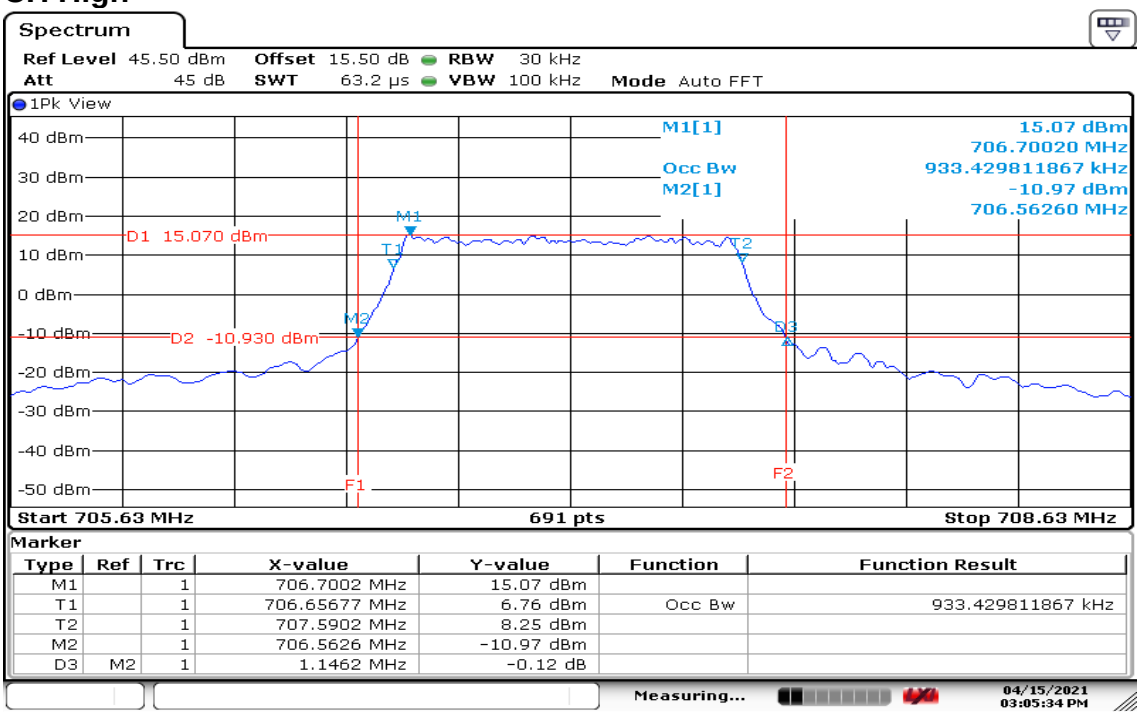
Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	703.2002 MHz	15.38 dBm		
T1		1	703.15677 MHz	7.06 dBm	Occ Bw	933.429811867 kHz
T2		1	704.0902 MHz	8.58 dBm		
M2		1	703.0618 MHz	-10.38 dBm		
D3	M2	1	1.1462 MHz	-0.11 dB		

Measuring... 04/15/2021 02:19:58 PM

Date: 15.APR.2021 14:19:58

CH High



Date: 15.APR.2021 15:05:35

8.4 PEAK TO AVERAGE POWER RATIO

LIMIT

In measuring transmissions in this band using an average power technique, peak-to-average power ratio (PAPR) of the transmission may not exceed 13 dB.

TEST PROCEDURES

1. According to KDB 971168D01.
2. The EUT was connect to spectrum analyzer and call box.
3. Set the CCDF function in spectrum analyzer.
4. The highest RF output power were measured and recorded the maximum PAPR level associated with a probability of 0.1%.
5. Record the Peak to Average Power Ratio.

TEST RESULTS

LTE Band 12

Temperature: 22.4℃ **Humidity:** 52.1% RH

Tested by: Dally Hong **Test Date:** April 15, 2021

CHANNEL BANDWIDTH: 1.4MHz / QPSK / Full RB

Frequency (MHz)	Channel	PEAK TO AVERAGE RATIO (dB)
699.7	23017	8.32
707.5	23095	8.46
715.3	23173	8.55

CHANNEL BANDWIDTH: 3MHz / QPSK / Full RB

Frequency (MHz)	Channel	PEAK TO AVERAGE RATIO (dB)
700.5	23025	8.43
707.5	23095	8.41
714.5	23165	5.19

CHANNEL BANDWIDTH: 5MHz / QPSK / Full RB

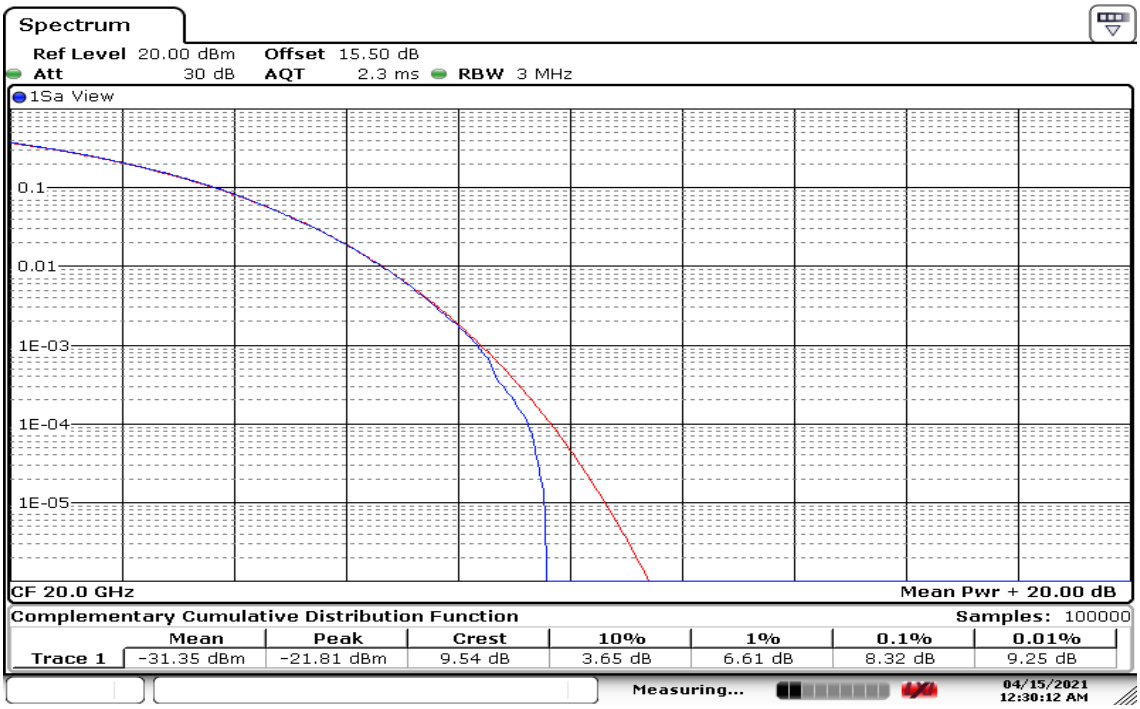
Frequency (MHz)	Channel	PEAK TO AVERAGE RATIO (dB)
701.5	23035	4.93
707.5	23095	6.64
713.5	23155	5.86

CHANNEL BANDWIDTH: 10MHz / QPSK / Full RB

Frequency (MHz)	Channel	PEAK TO AVERAGE RATIO (dB)
704	23060	6.58
707.5	23095	5.25
711	23130	5.39

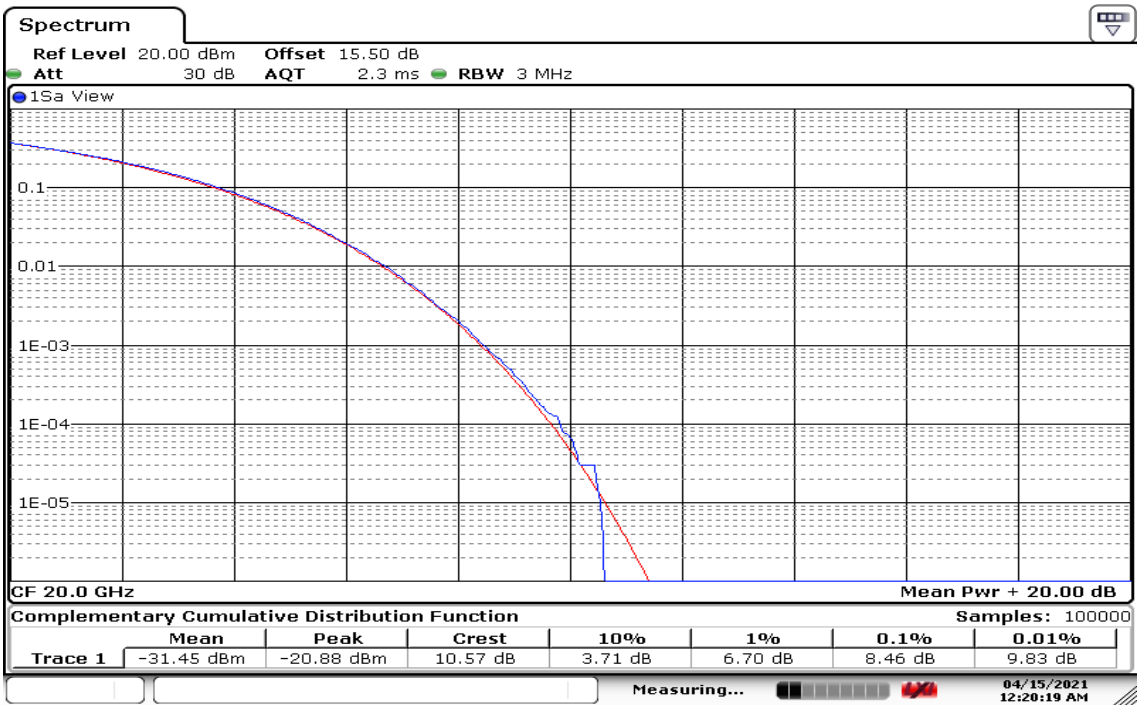
LTE Band 12

QPSK / RB =6, RB Offset = 0
BW: 1.4MHz
CH Low



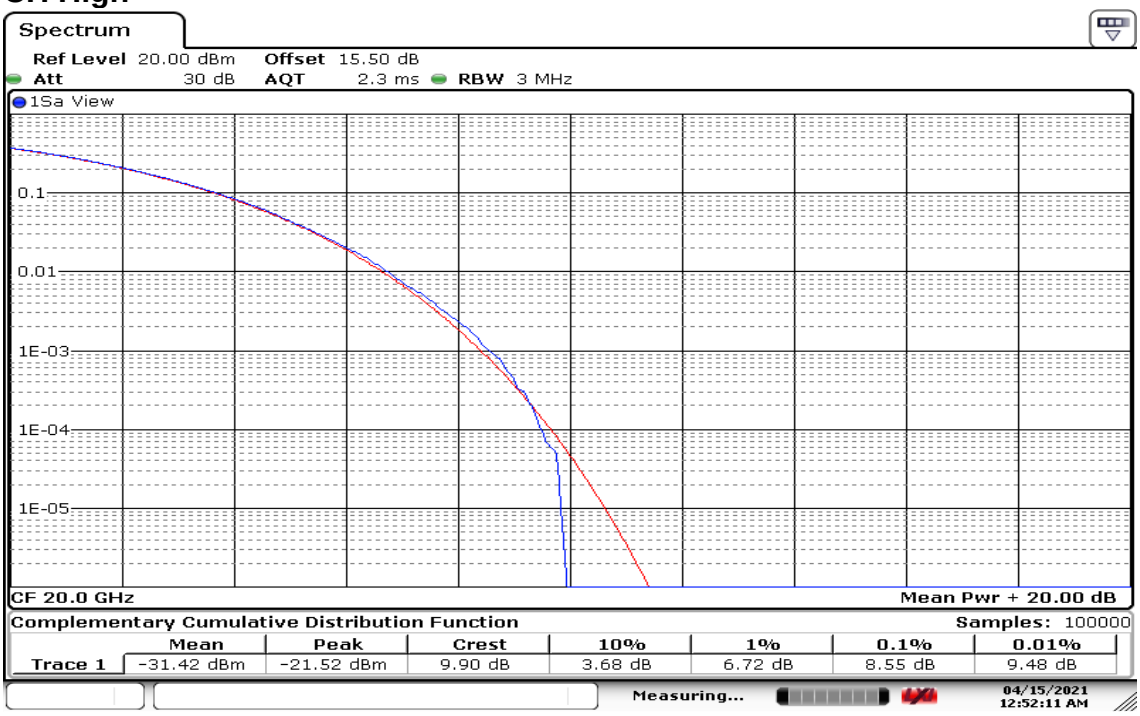
Date: 15.APR.2021 00:30:11

CH Mid



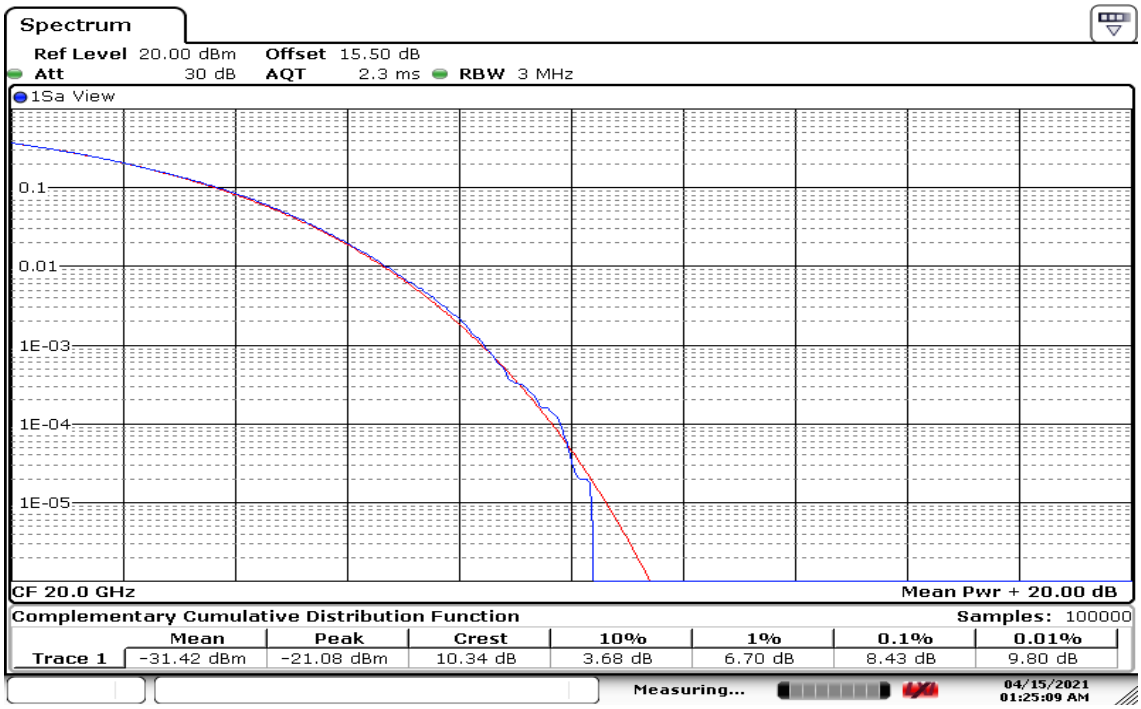
Date: 15.APR.2021 00:20:20

CH High



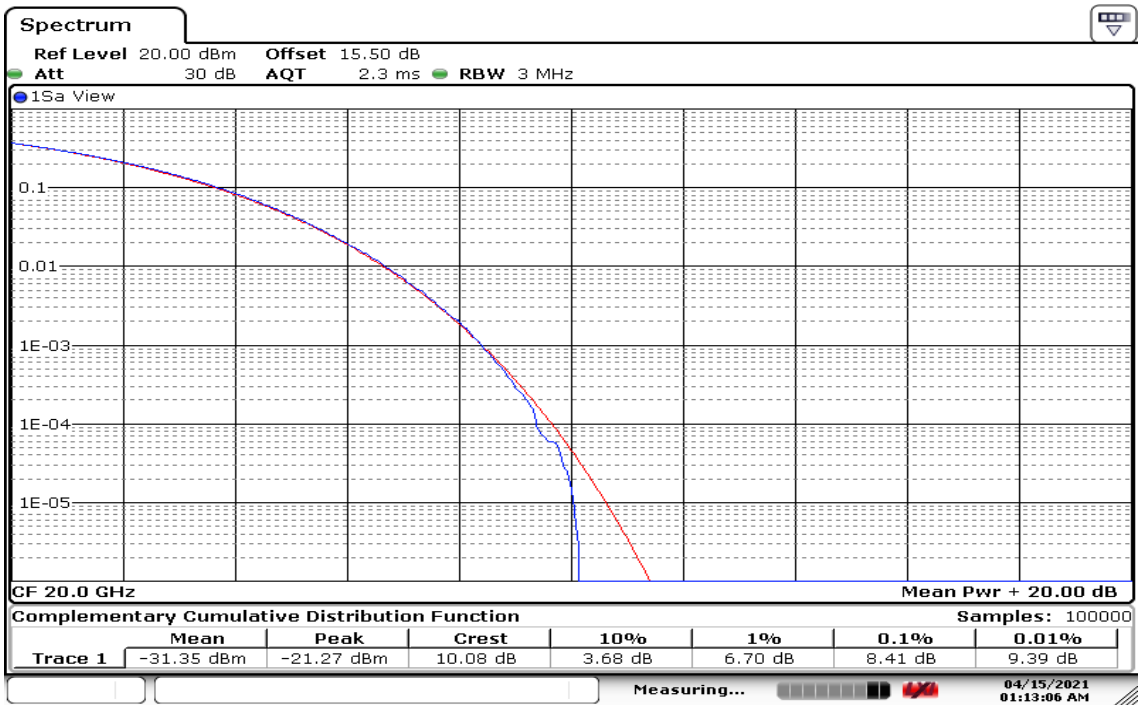
Date: 15.APR.2021 00:52:11

BW: 3MHz
CH Low



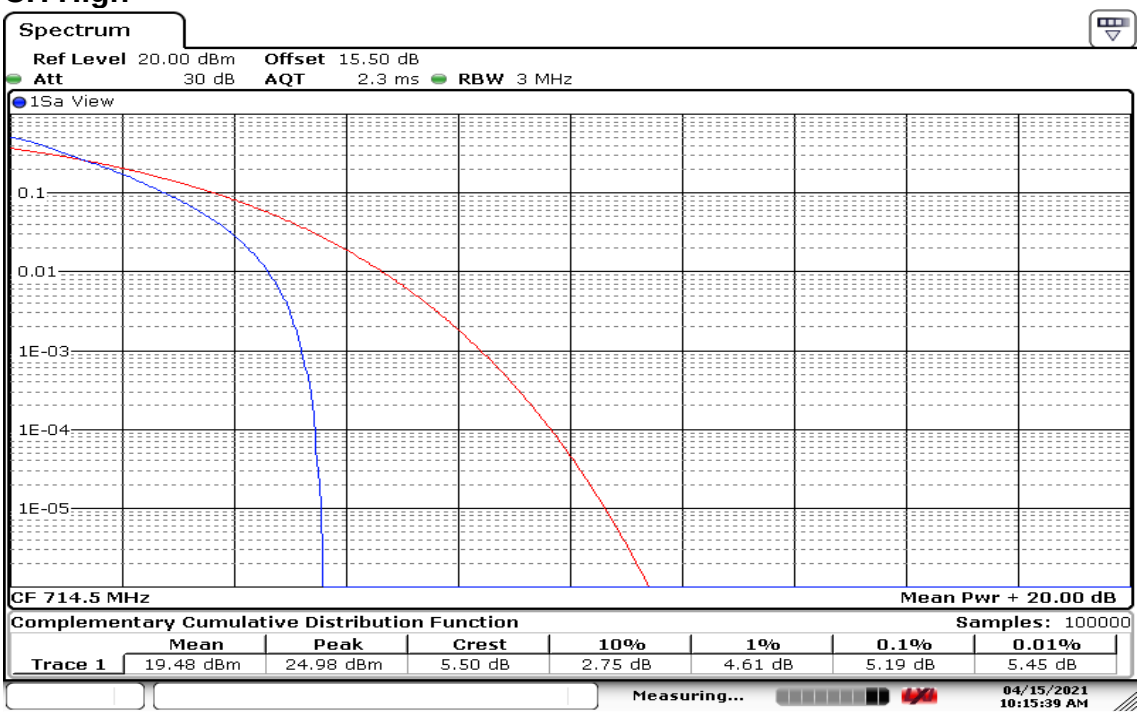
Date: 15.APR.2021 01:25:09

CH Mid



Date: 15.APR.2021 01:13:06

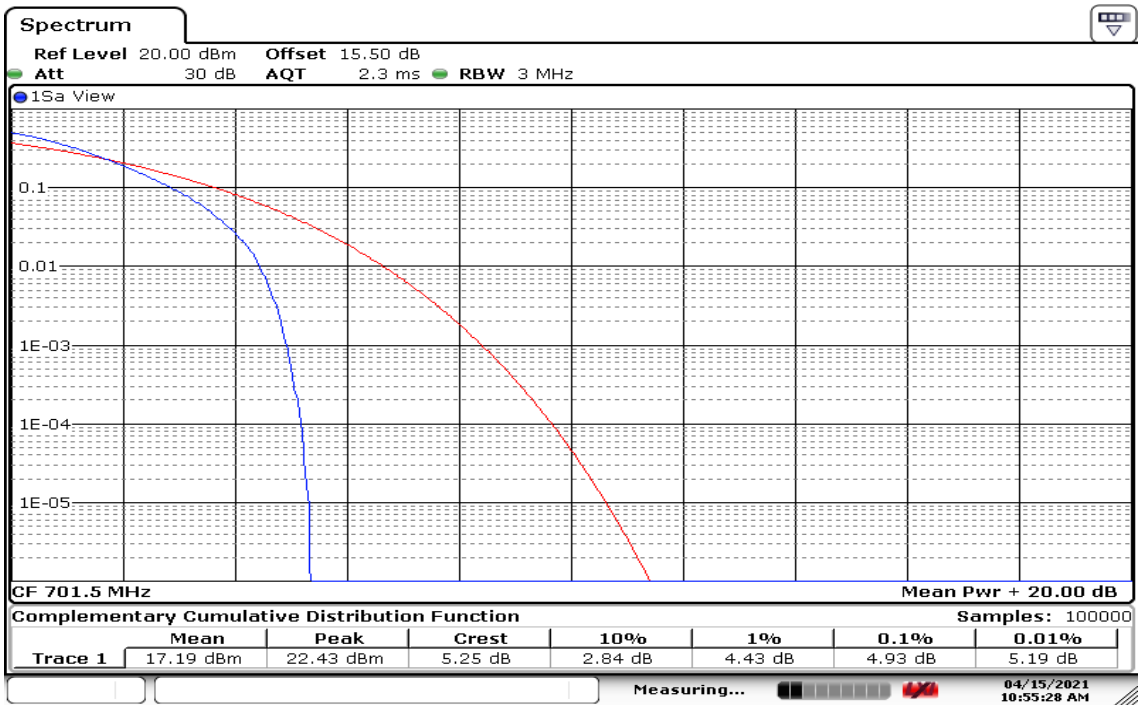
CH High



Date: 15.APR.2021 10:15:40

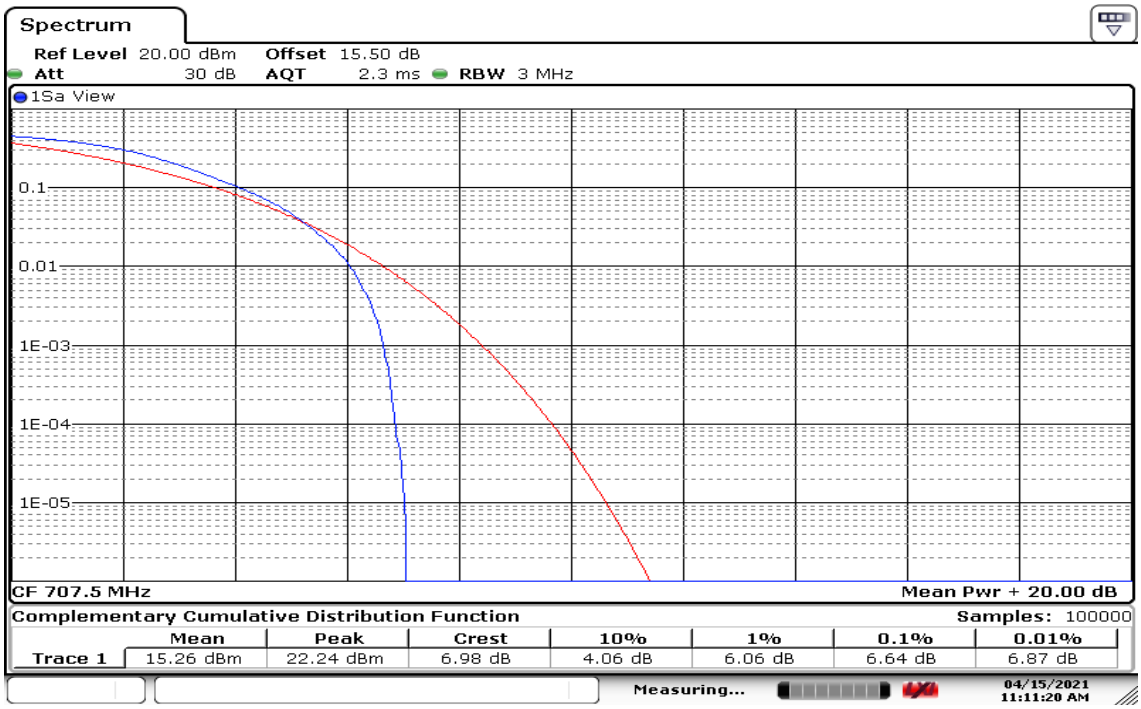
BW: 5MHz

CH Low



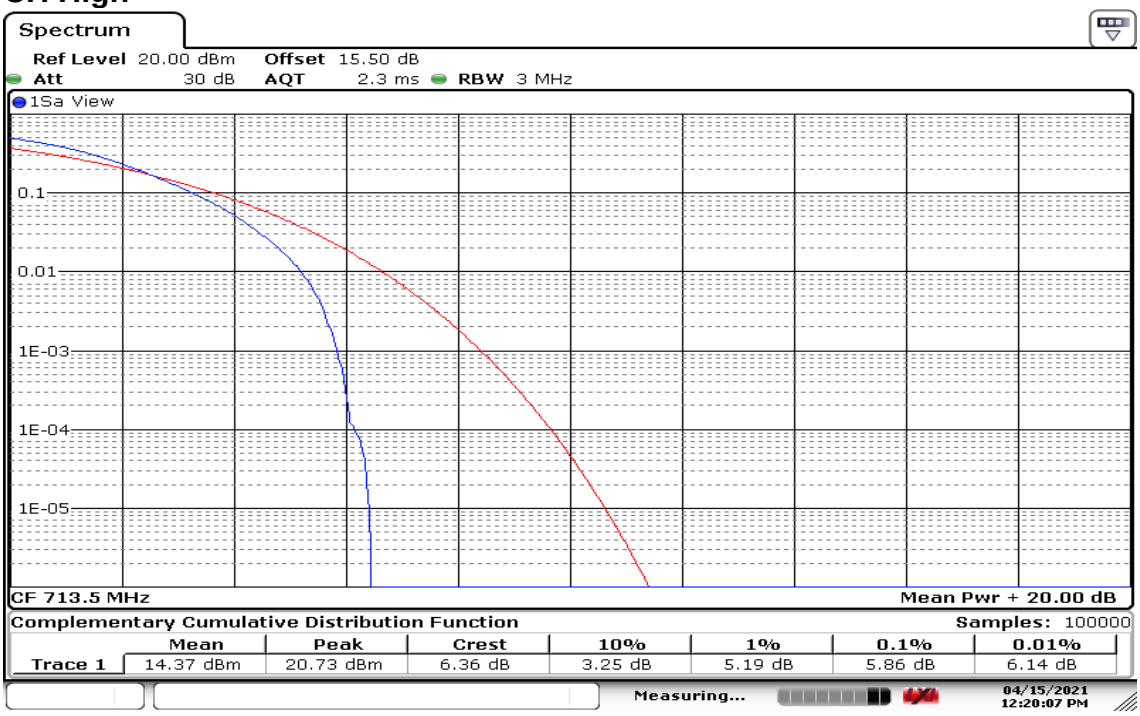
Date: 15.APR.2021 10:55:28

CH Mid



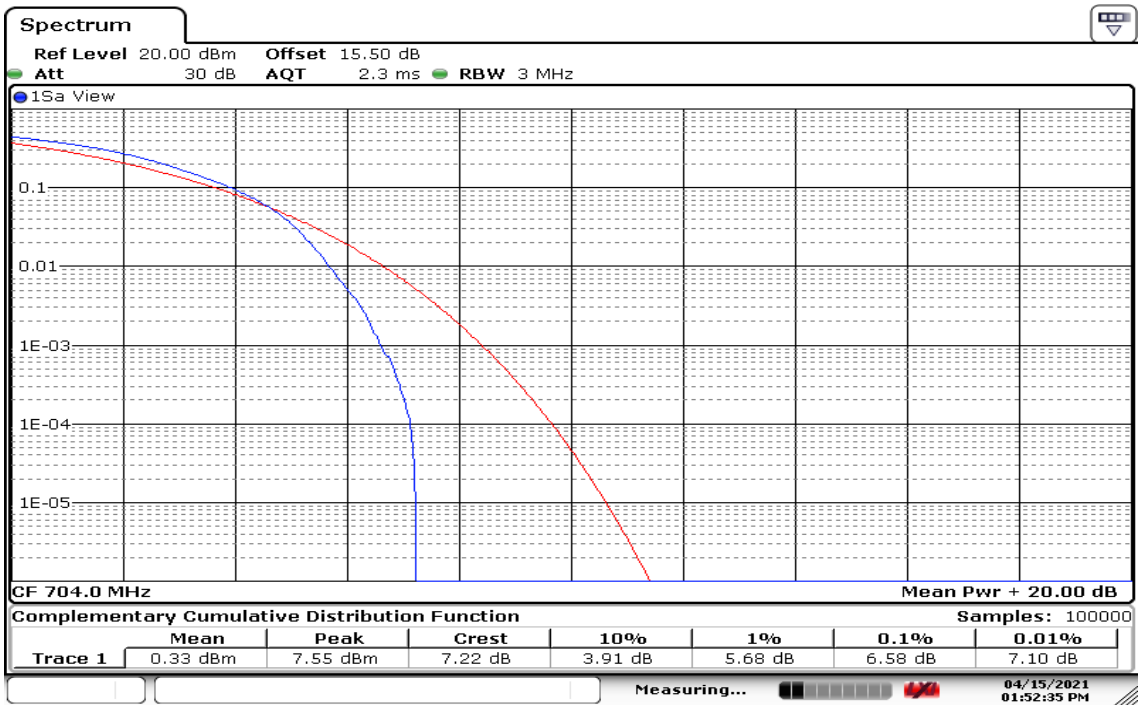
Date: 15.APR.2021 11:11:21

CH High



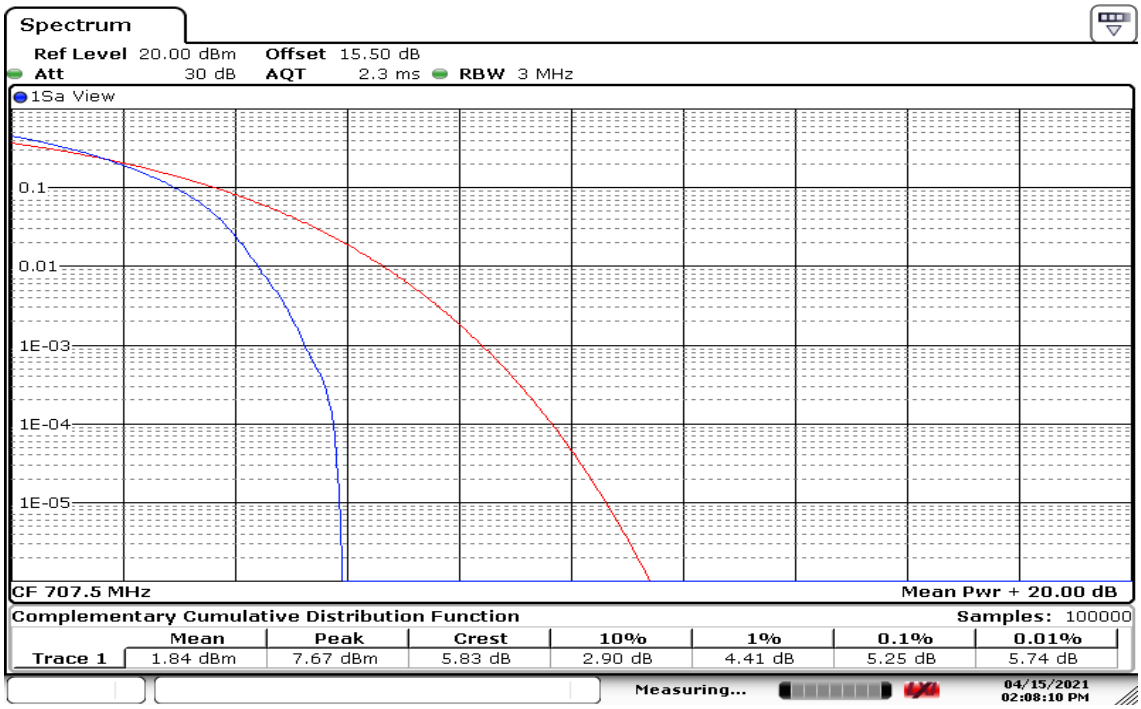
Date: 15.APR.2021 12:20:08

BW: 10MHz
CH Low



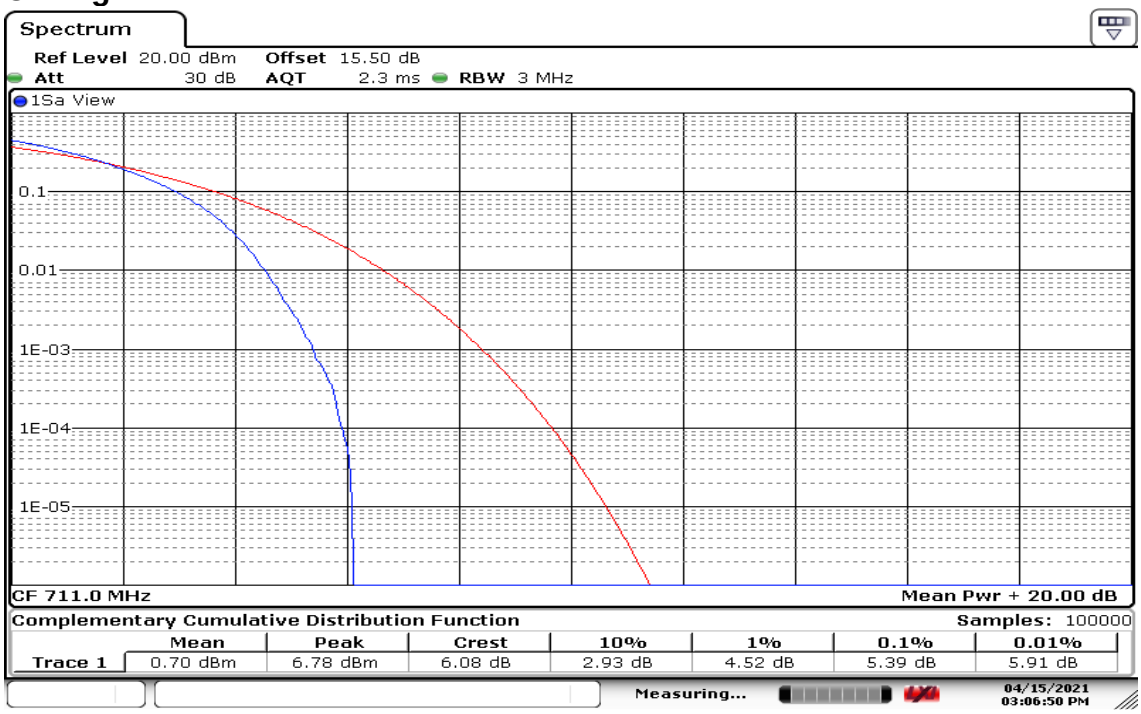
Date: 15.APR.2021 13:52:36

CH Mid



Date: 15.APR.2021 14:08:11

CH High



Date: 15.APR.2021 15:06:51

8.5 CONDUCTED BAND EDGE MEASUREMENT

LIMIT

Part 27.53 (g), Band 12
For operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least 43 + 10 log (P) dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

TEST PROCEDURES

KDB 971168 D01 Power Meas License Digital Systems – Section 6.0
1. RBW ≥ 1% of the emission bandwidth
2. VBW ≥ 3 x RBW
3. Span was set large enough so as to capture all out of emissions near the band edge.

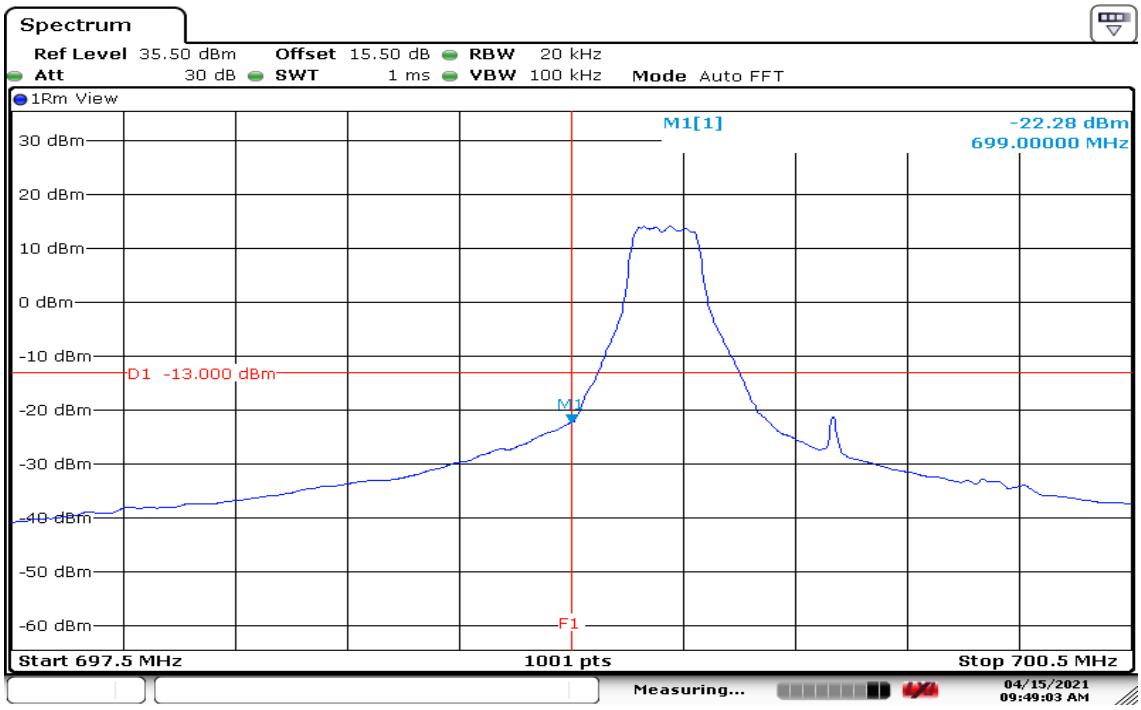
TEST RESULTS:

Temperature:	22.4℃	**Humidity:**	52.1% RH
Tested by:	Dally Hong	**Test Date:**	April 15, 2021

LTE Band 12

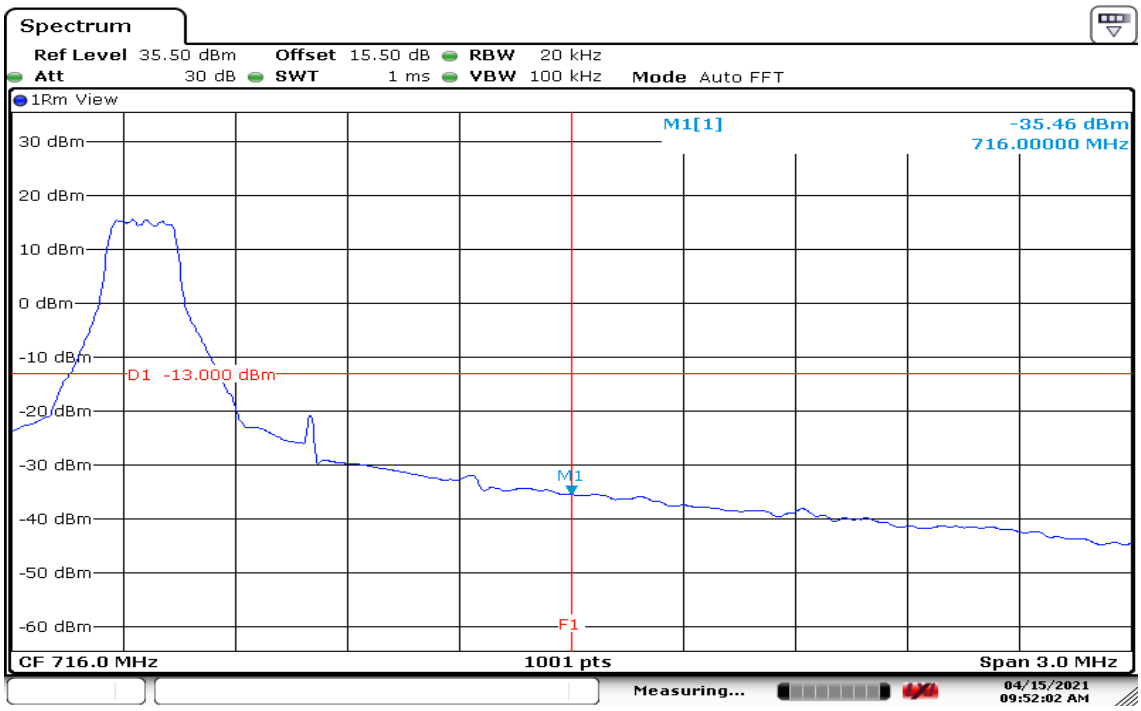
CHANNEL BANDWIDTH: 1.4MHz / QPSK / 1RB ALLOCATED

LOWER BAND EDGE



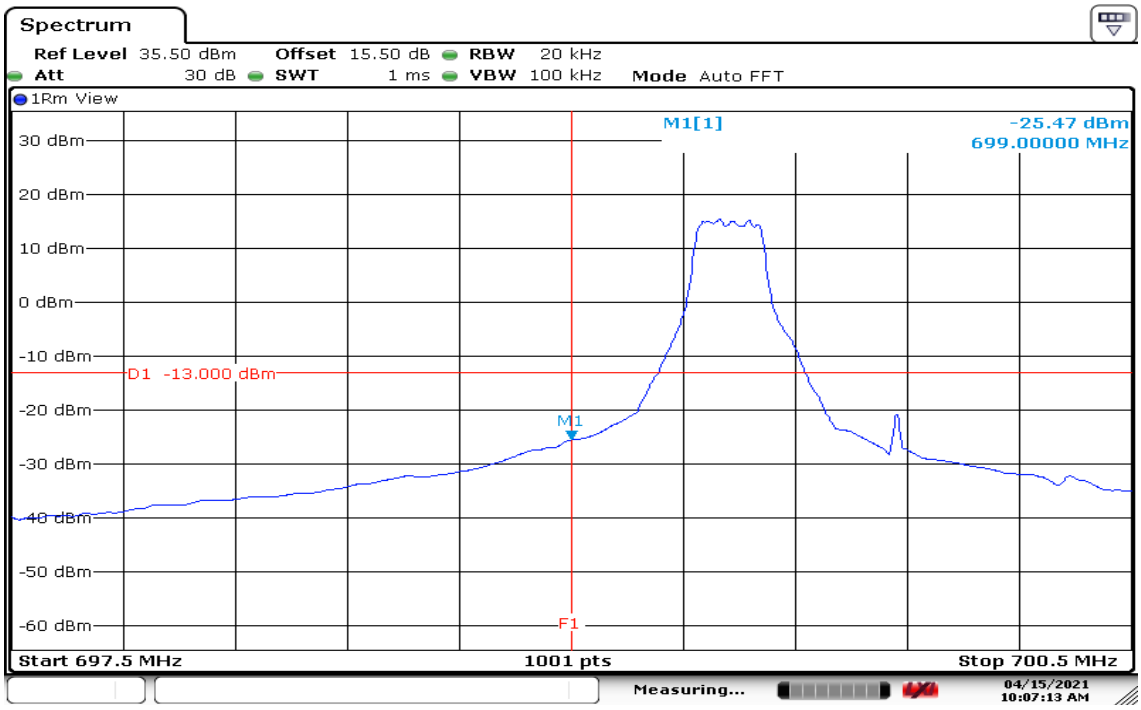
Date: 15.APR.2021 09:49:04

HIGHER BAND EDGE



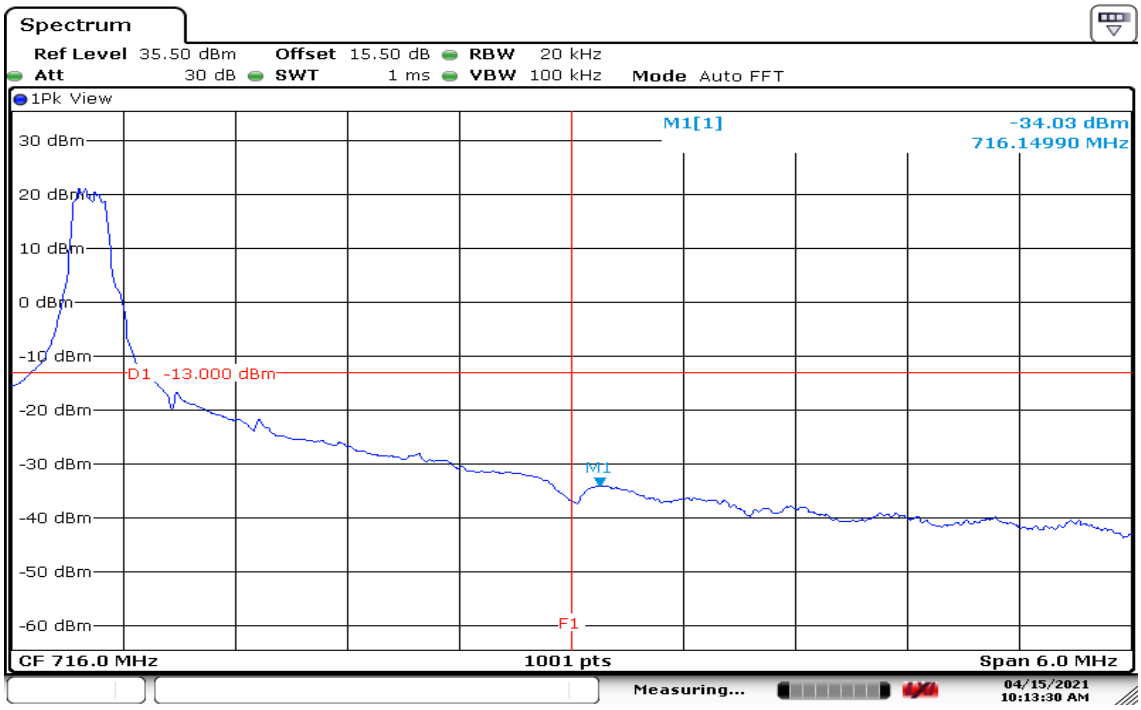
Date: 15.APR.2021 09:52:02

CHANNEL BANDWIDTH: 3MHz / QPSK / 1RB ALLOCATED
LOWER BAND EDGE



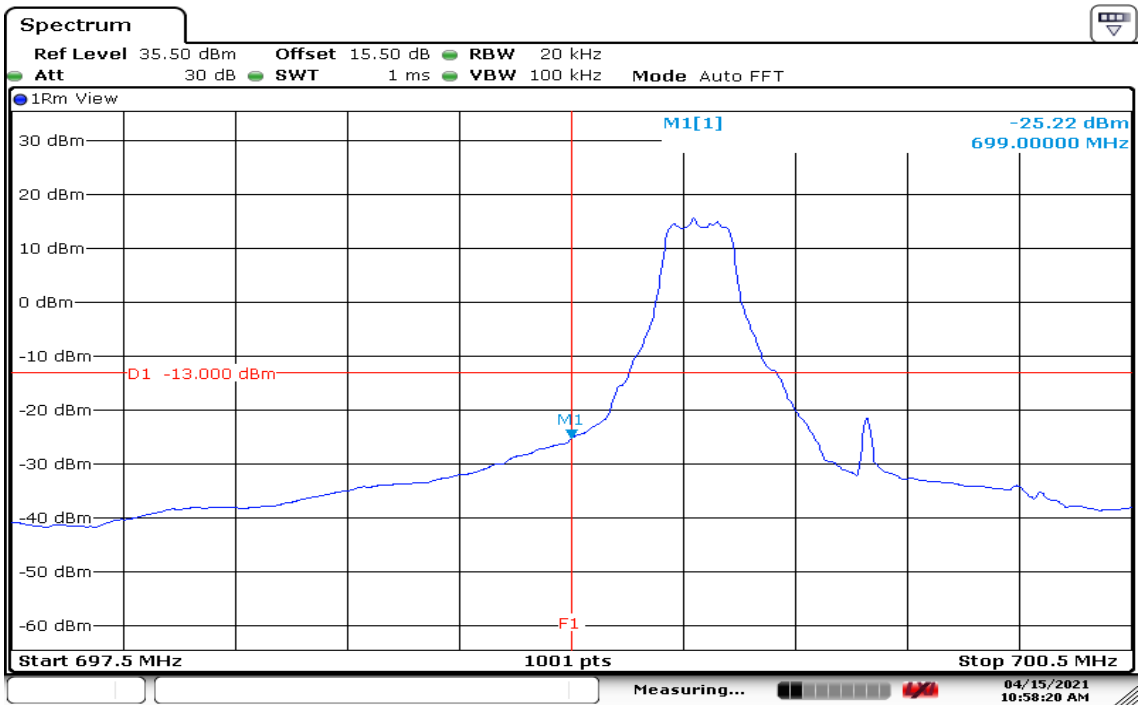
Date: 15.APR.2021 10:07:13

HIGHER BAND EDGE



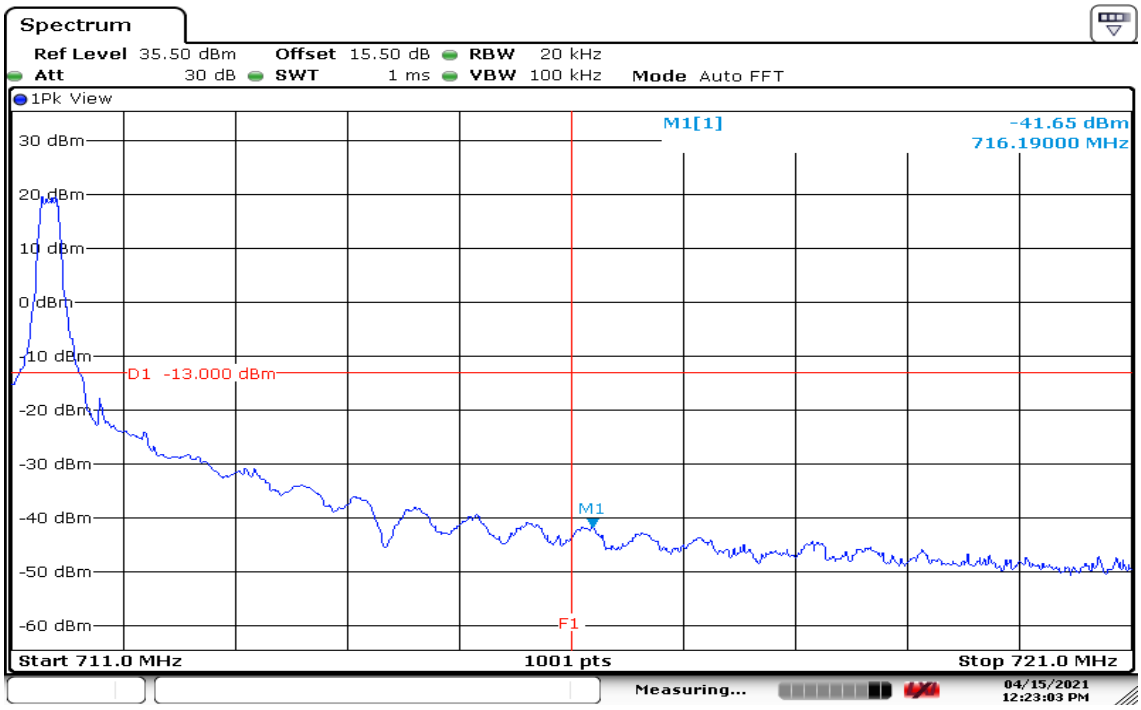
Date: 15.APR.2021 10:13:30

CHANNEL BANDWIDTH: 5MHz / QPSK / 1RB ALLOCATED
LOWER BAND EDGE



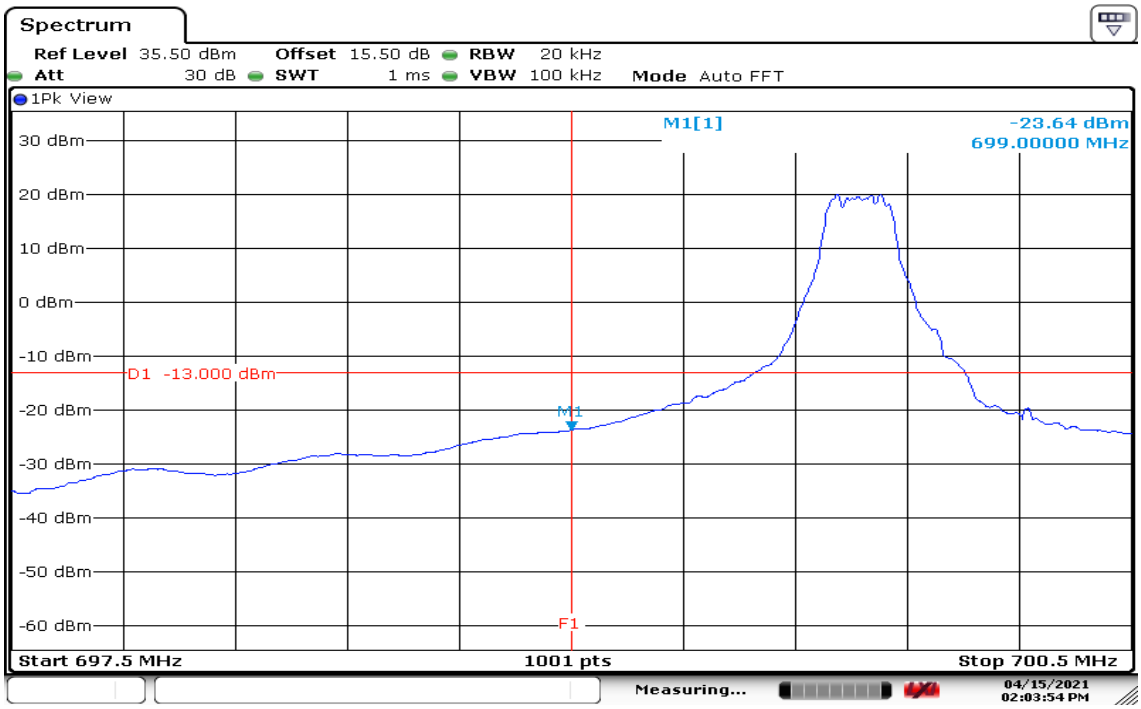
Date: 15.APR.2021 10:58:20

HIGHER BAND EDGE



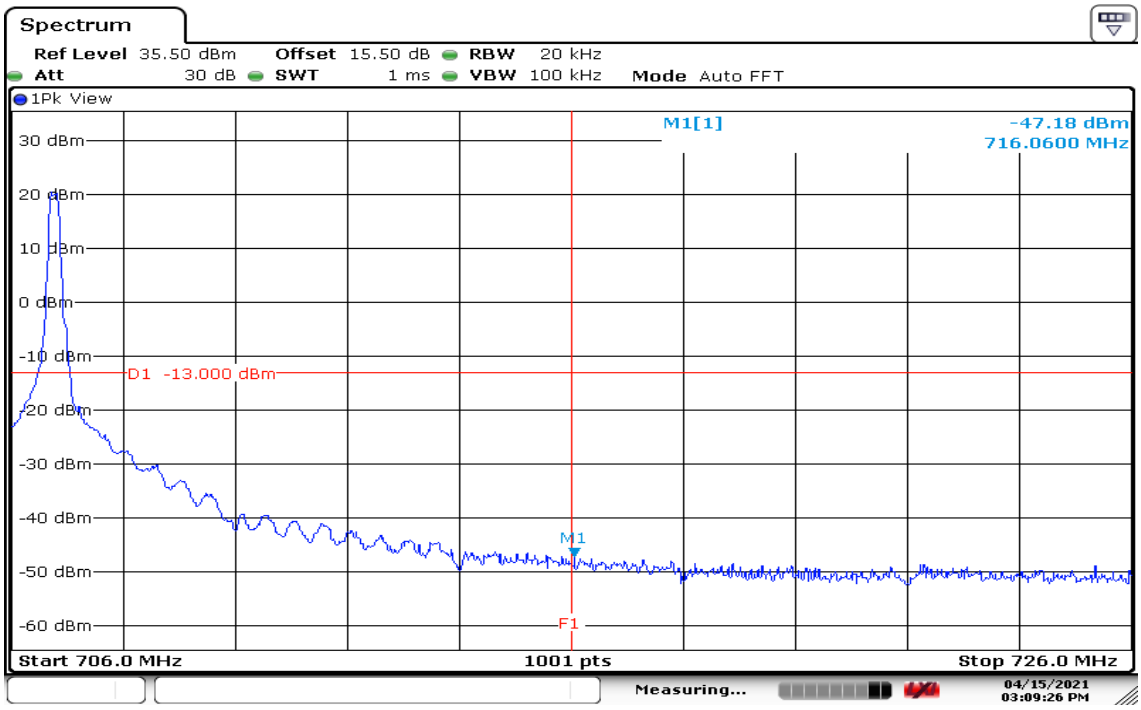
Date: 15.APR.2021 12:23:03

CHANNEL BANDWIDTH: 10MHz / QPSK / 1RB ALLOCATED
LOWER BAND EDGE



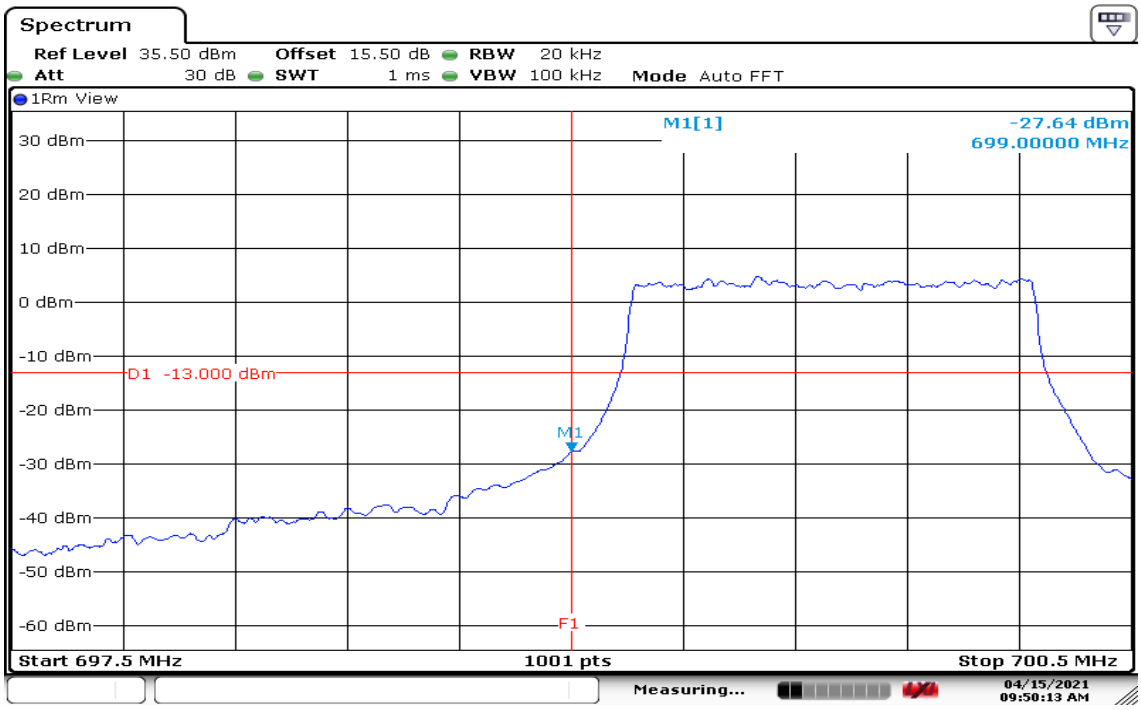
Date: 15.APR.2021 14:03:54

HIGHER BAND EDGE



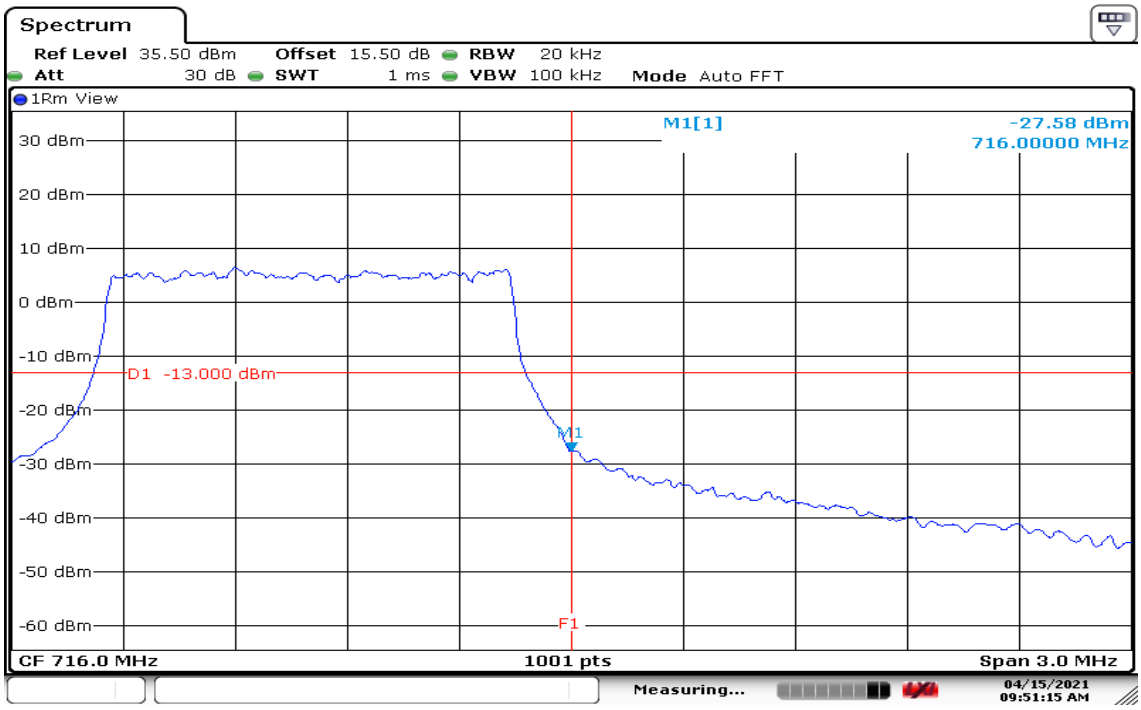
Date: 15.APR.2021 15:09:26

CHANNEL BANDWIDTH: 1.4MHz / QPSK / 100%RB ALLOCATED
LOWER BAND EDGE



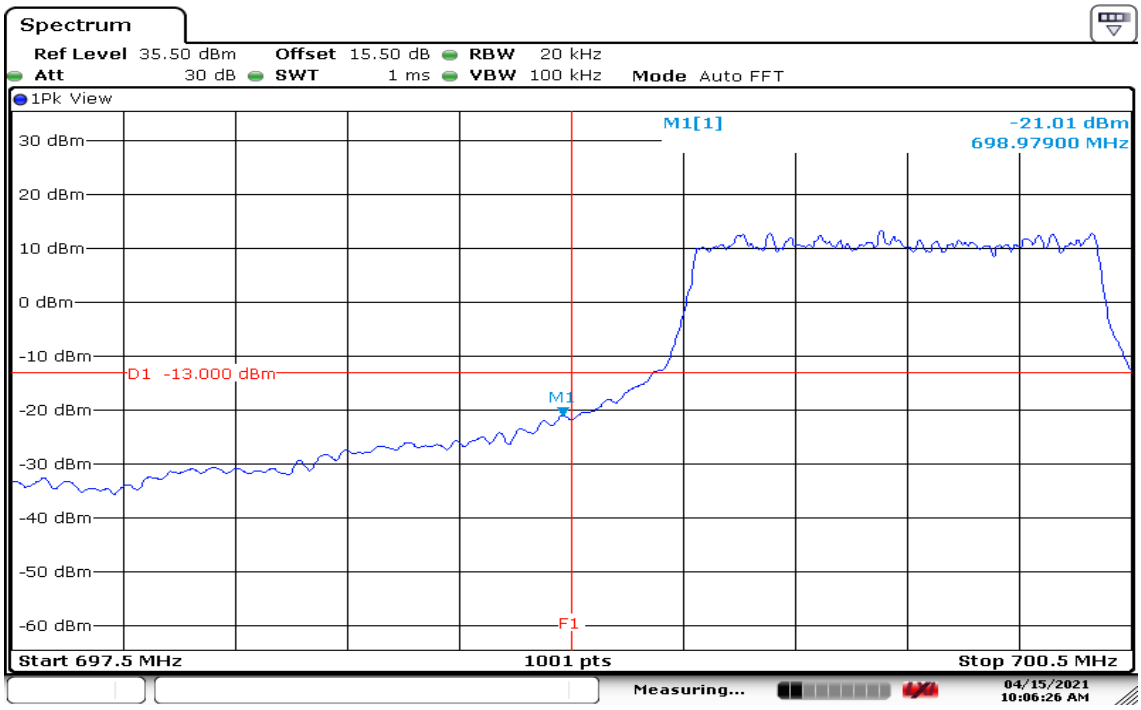
Date: 15.APR.2021 09:50:13

HIGHER BAND EDGE



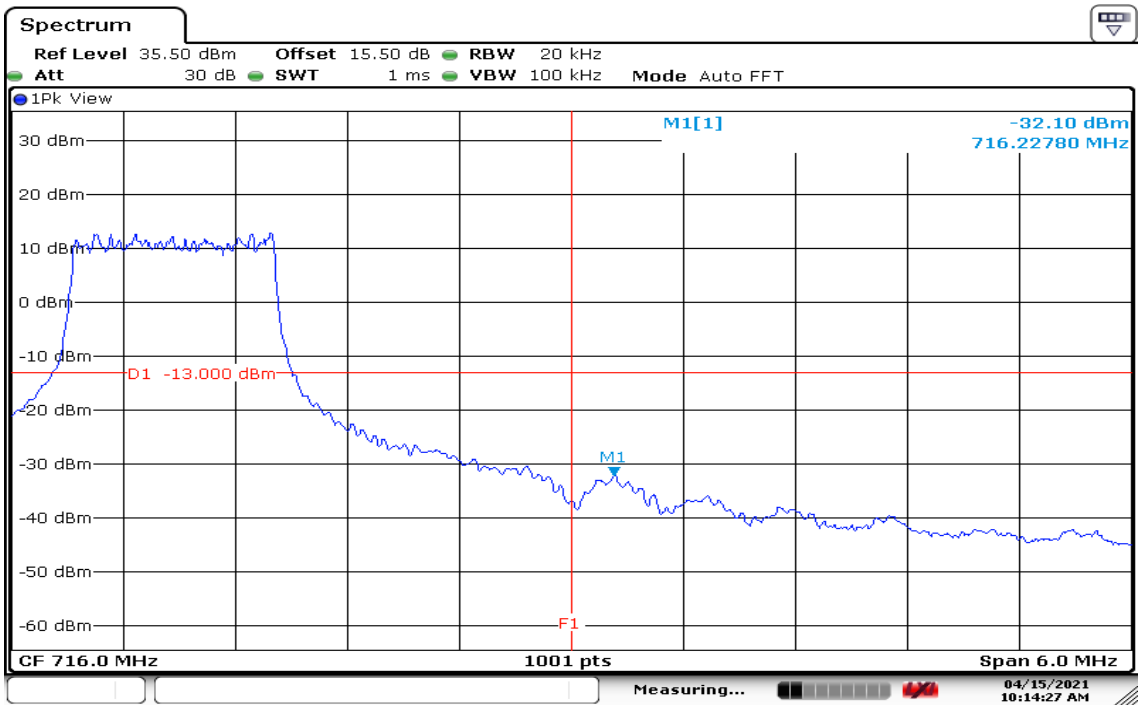
Date: 15.APR.2021 09:51:16

CHANNEL BANDWIDTH: 3MHz / QPSK / 100%RB ALLOCATED
LOWER BAND EDGE



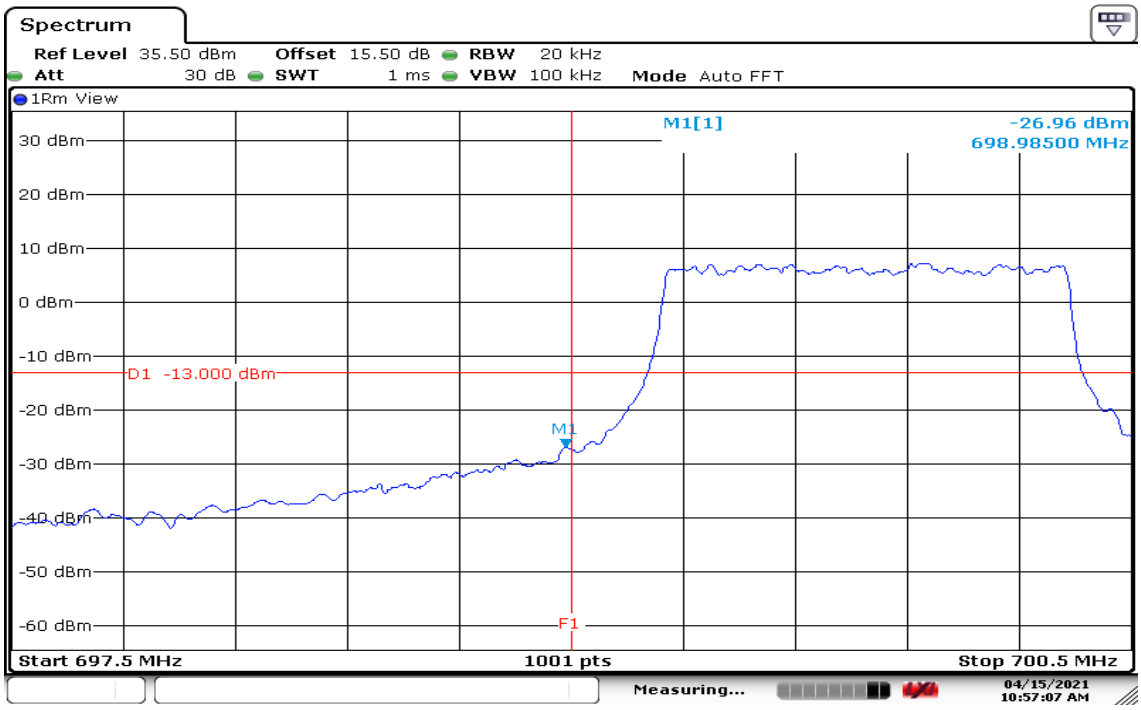
Date: 15.APR.2021 10:06:26

HIGHER BAND EDGE



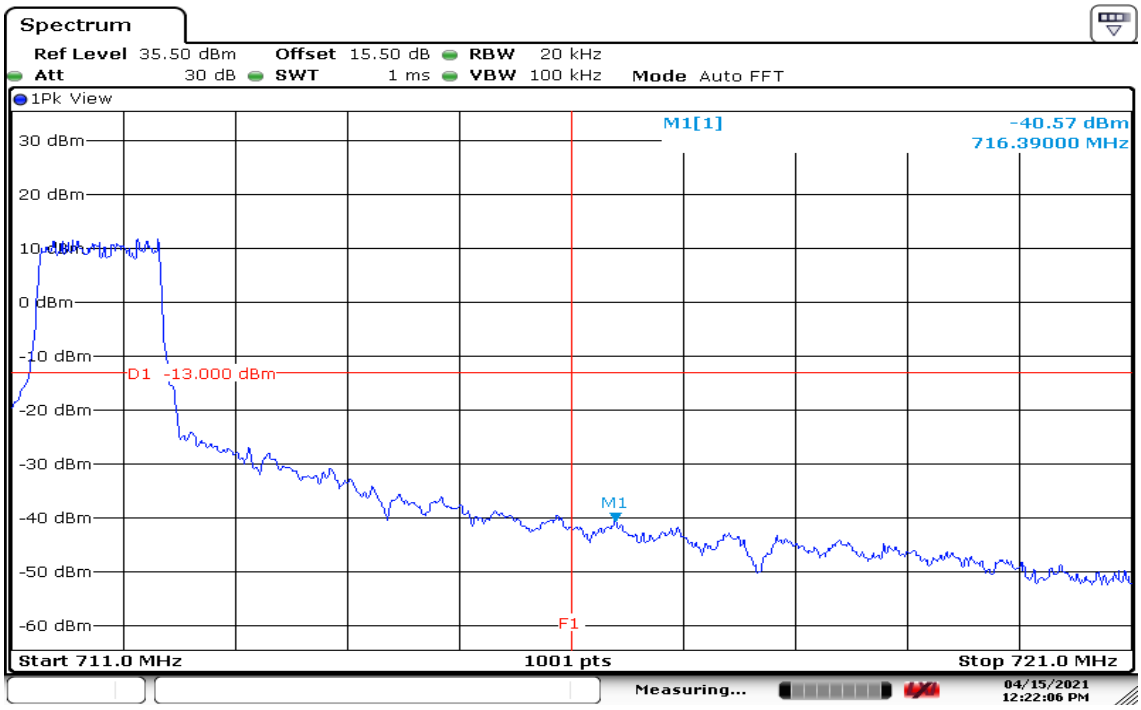
Date: 15.APR.2021 10:14:27

CHANNEL BANDWIDTH: 5MHz / QPSK / 100%RB ALLOCATED
LOWER BAND EDGE



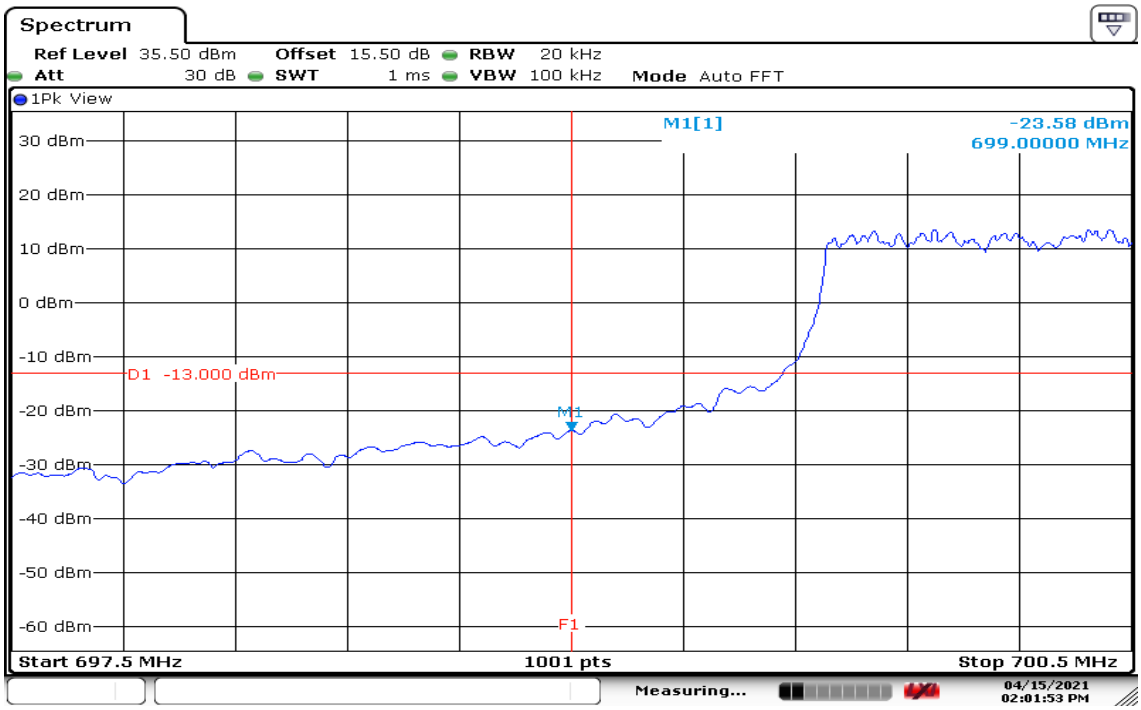
Date: 15.APR.2021 10:57:07

HIGHER BAND EDGE



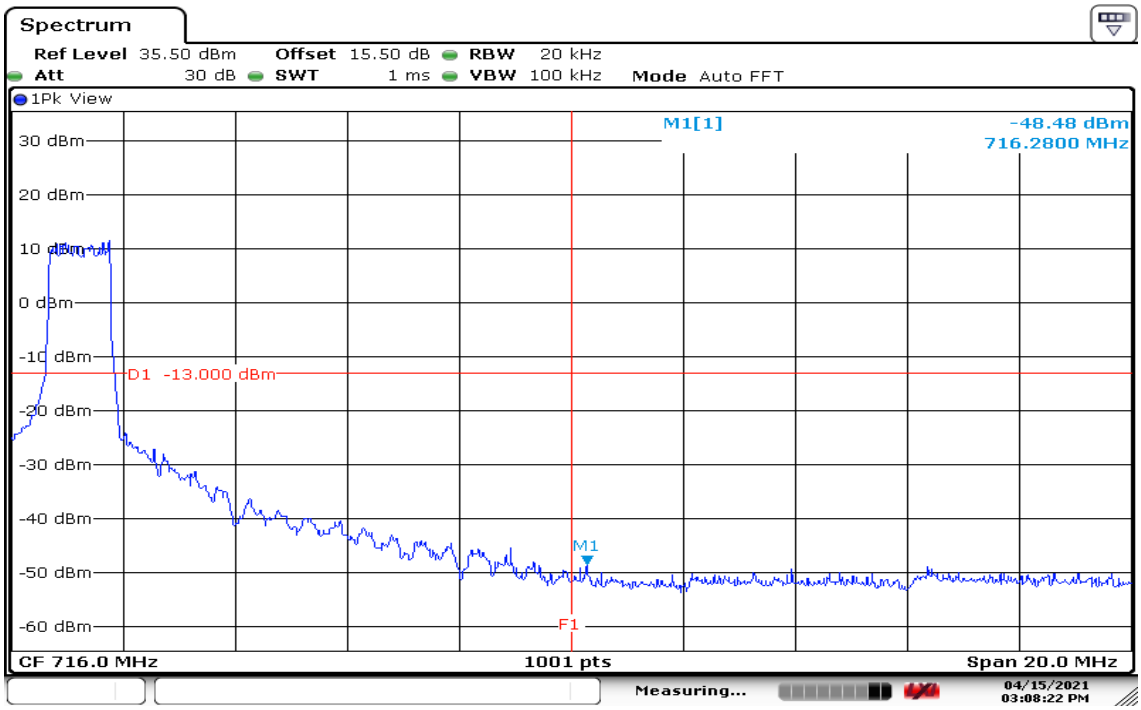
Date: 15.APR.2021 12:22:06

CHANNEL BANDWIDTH: 10MHz / QPSK / 100%RB ALLOCATED
LOWER BAND EDGE



Date: 15.APR.2021 14:01:54

HIGHER BAND EDGE



Date: 15.APR.2021 15:08:22

8.6 CONDUCTED SPURIOUS EMISSIONS

LIMITS

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least 43 +10 log10(P) dB. The limit of emission equal to –13dBm

TEST PROCEDURES

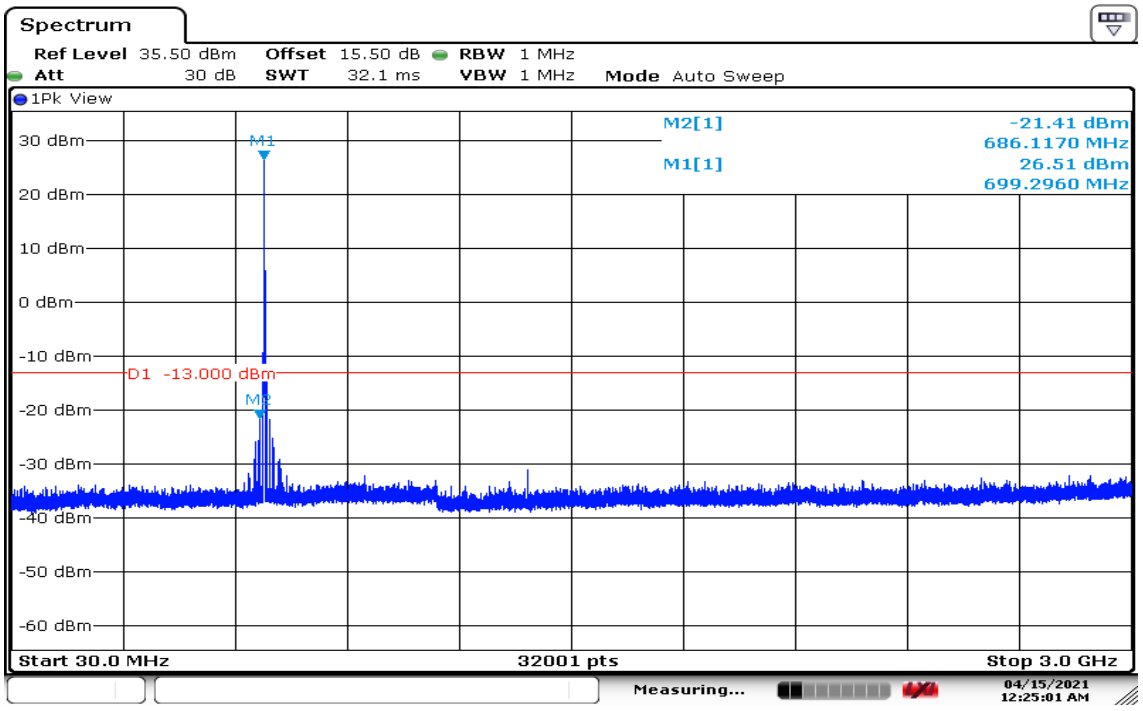
1. According to KDB 971168D01, photograph 6.0
2. The EUT was connect to spectrum analyzer and call box.
3. The RF output of EUT was connected to the spectrum analyzer.
4. Set the spectrum analyzer , RBW=1MHz, VBW=3MHz.
5. Record the maximum spurious emission.
6. The fundamental frequency should be excluded against the limit in operating band.

TEST RESULTS

Temperature:	22.7℃	**Humidity:**	54.3% RH
Tested by:	Dally Hong	**Test Date:**	March 30, 2021

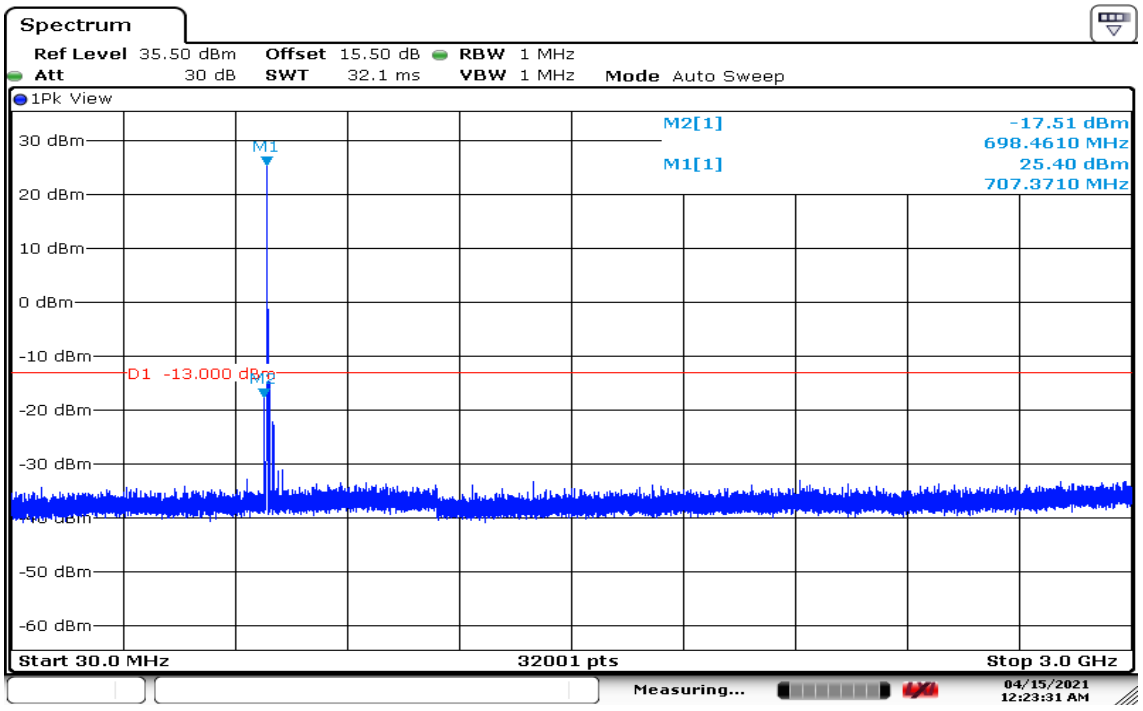
Temperature:	22.4℃	**Humidity:**	52.1% RH
Tested by:	Dally Hong	**Test Date:**	April 15, 2021

LTE Band 12
QPSK / 1RB
CHANNEL BANDWIDTH: 1.4MHz / 30MHz-3GHz
CH Low



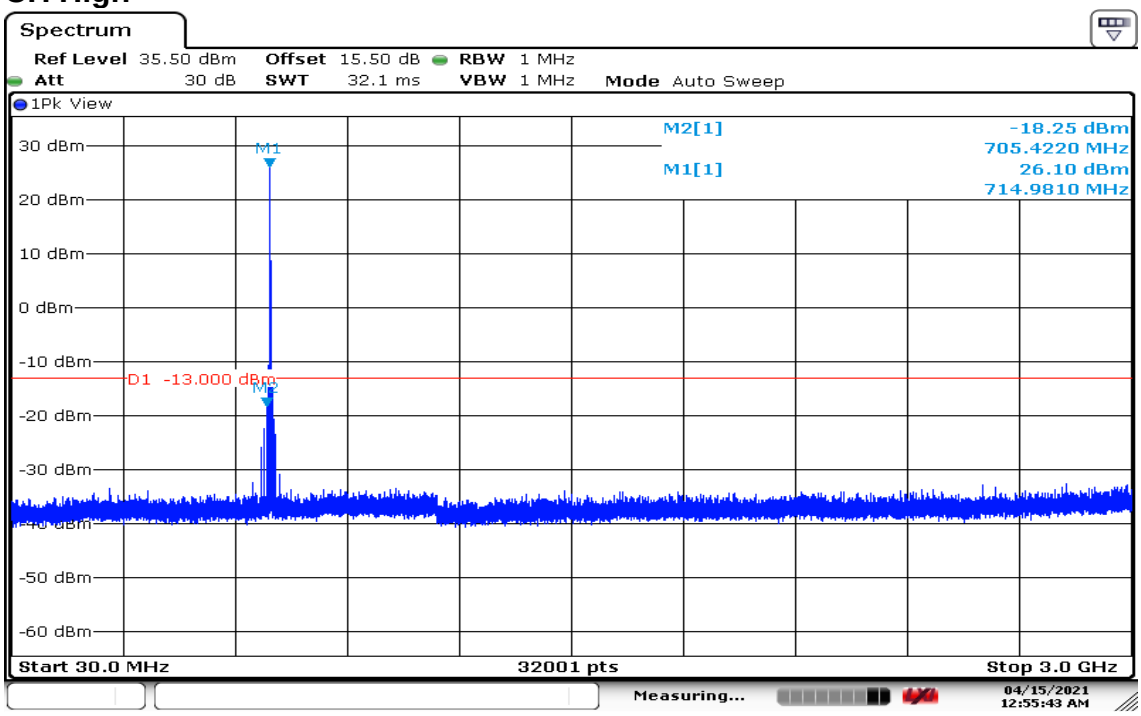
Date: 15.APR.2021 00:25:02

CH Mid



Date: 15.APR.2021 00:23:31

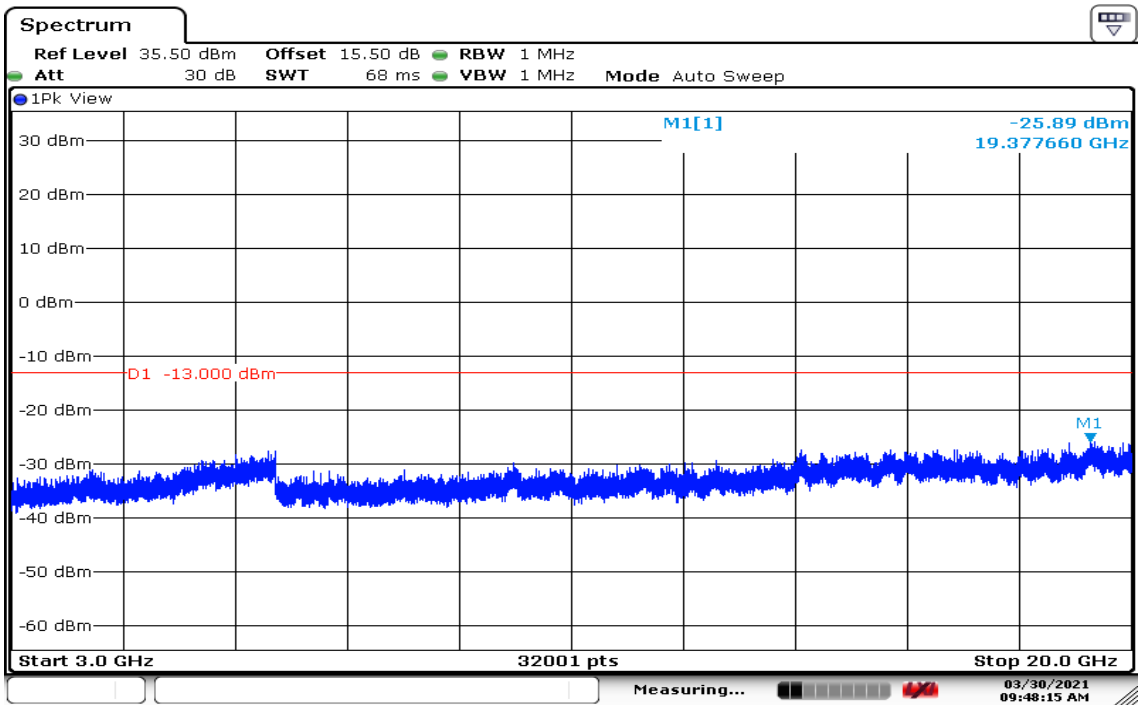
CH High



Date: 15.APR.2021 00:55:43

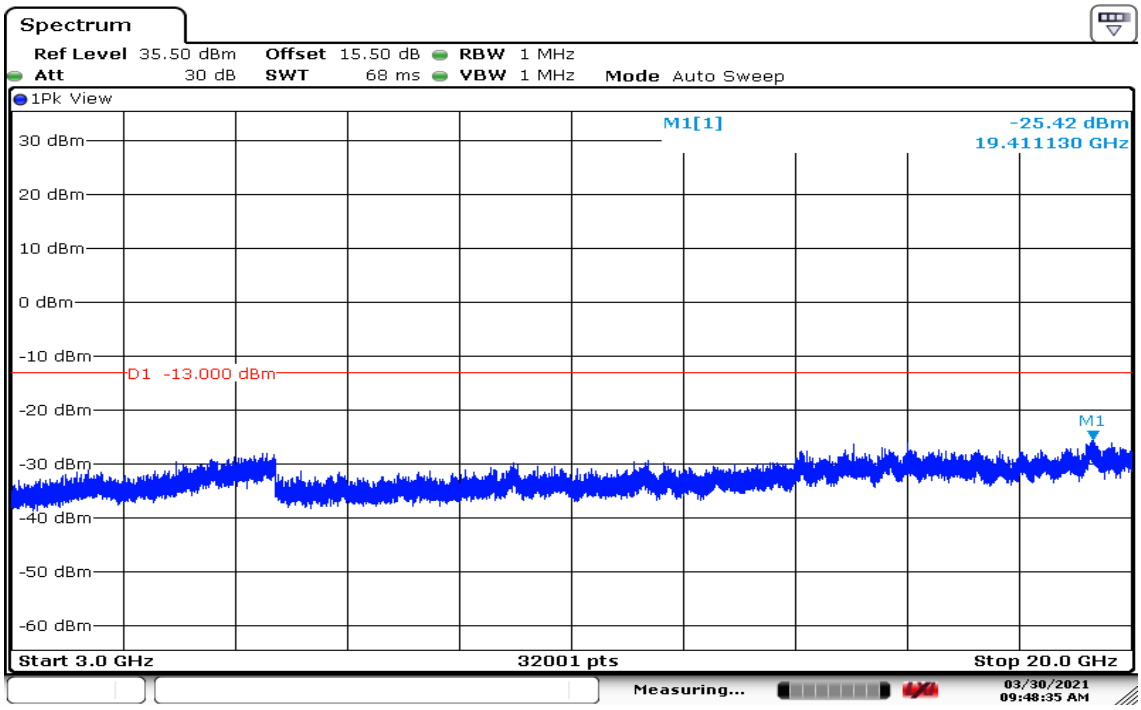
CHANNEL BANDWIDTH: 1.4MHz / 3GHz-20GHz

CH Low



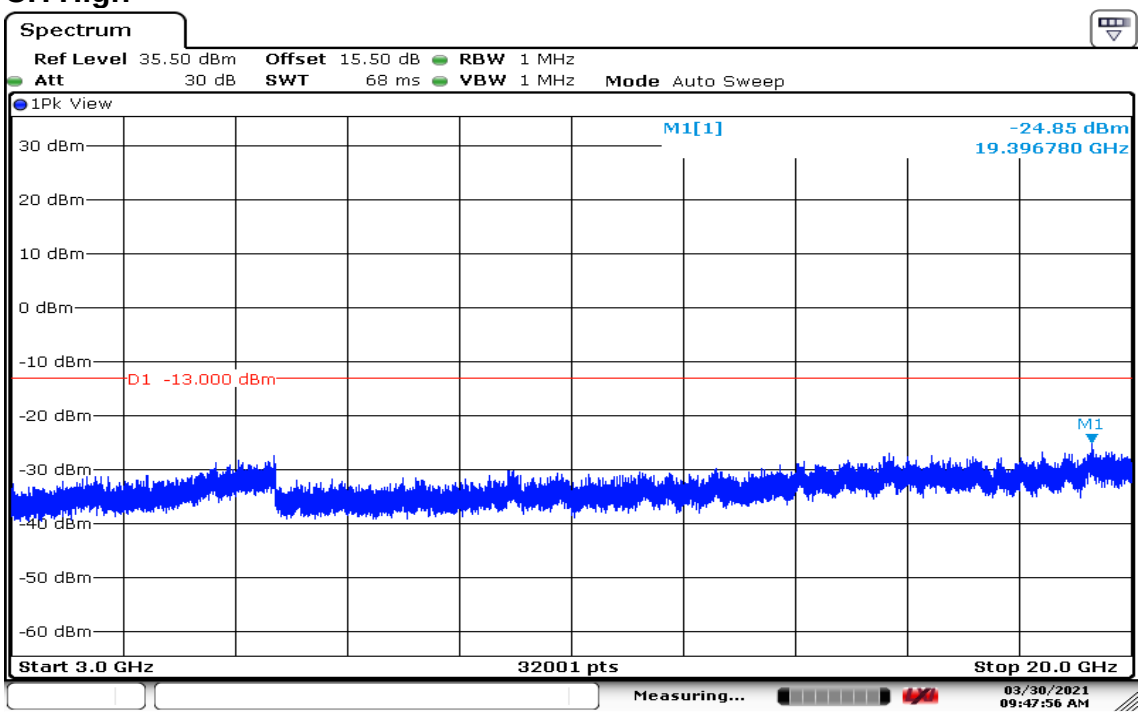
Date: 30.MAR.2021 09:48:15

CH Mid



Date: 30.MAR.2021 09:48:36

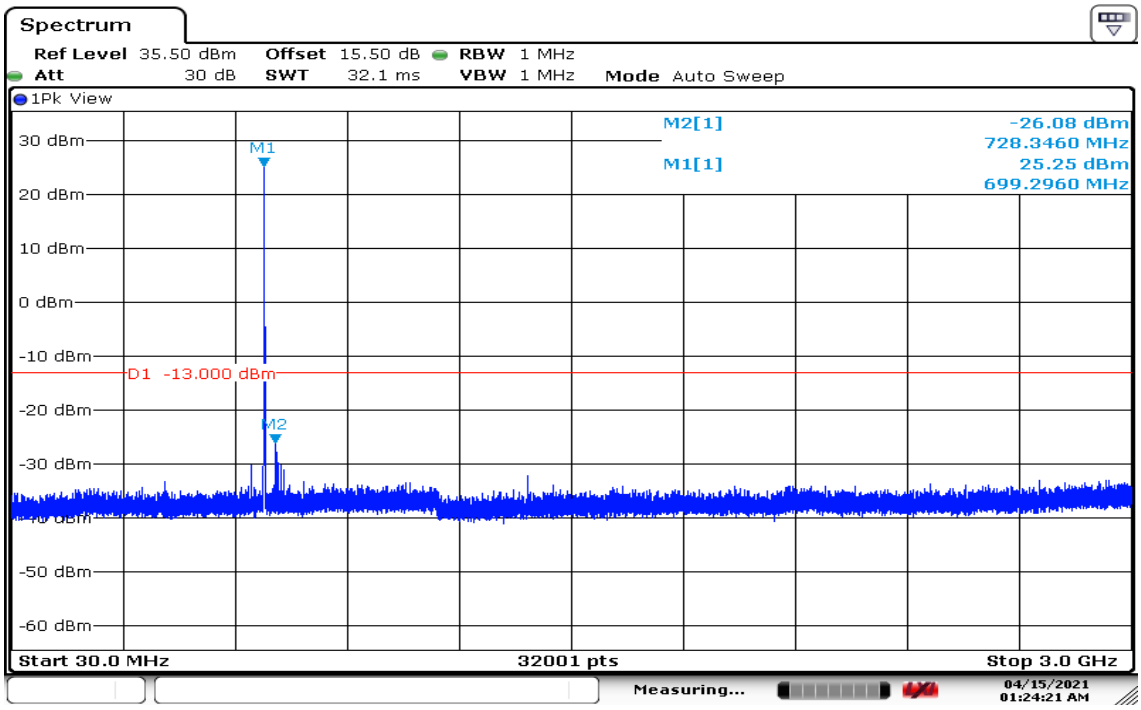
CH High



Date: 30.MAR.2021 09:47:56

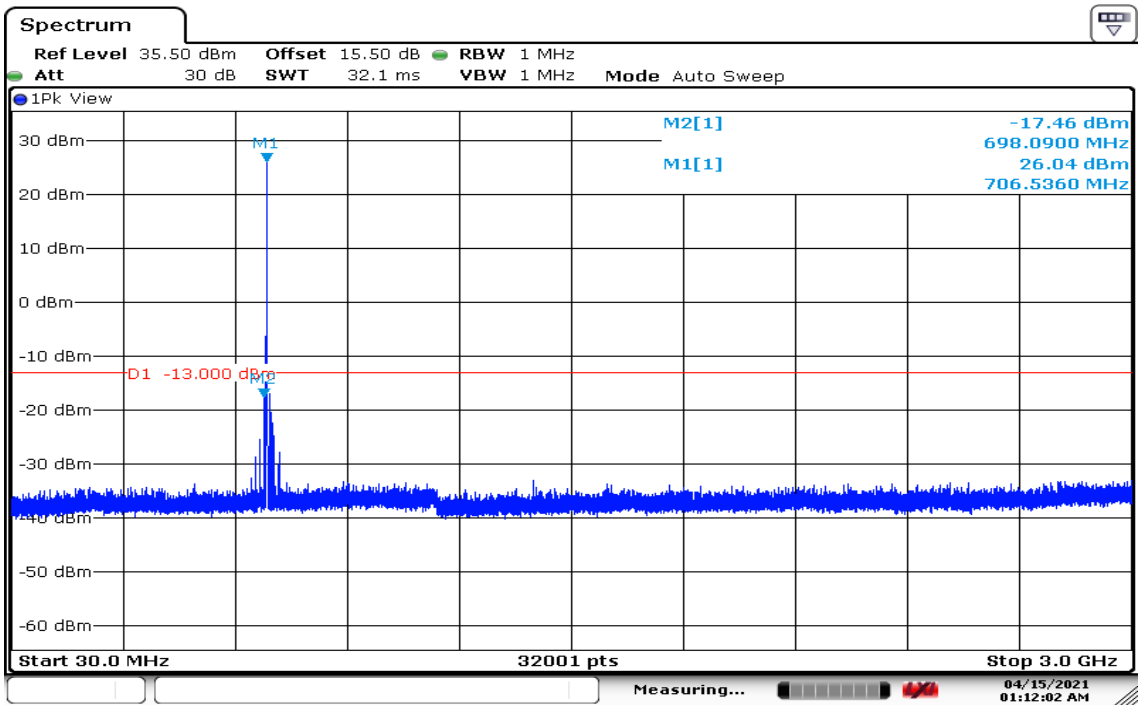
CHANNEL BANDWIDTH: 3MHz / 30MHz-3GHz

CH Low



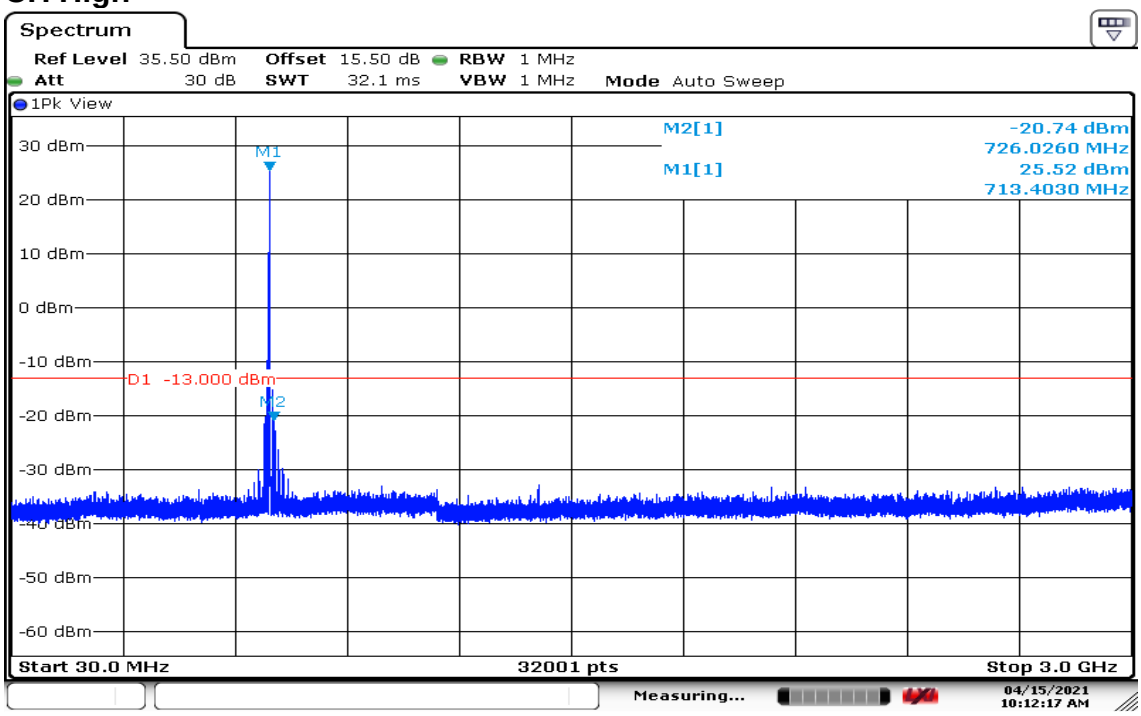
Date: 15.APR.2021 01:24:22

CH Mid



Date: 15.APR.2021 01:12:03

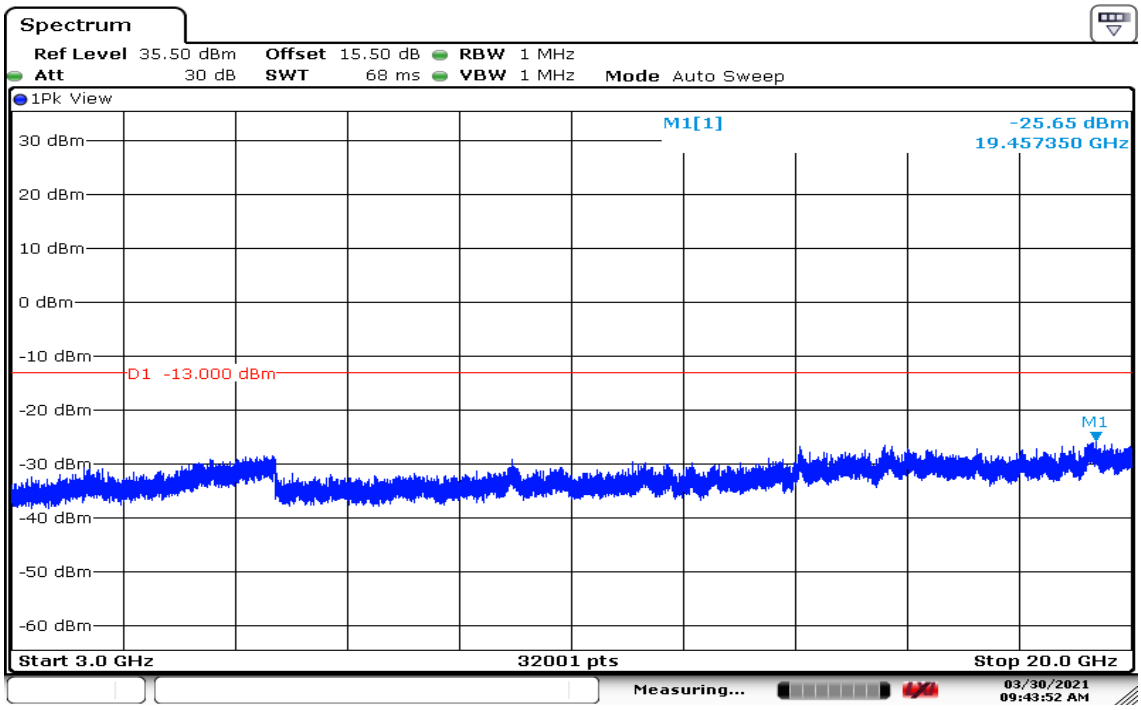
CH High



Date: 15.APR.2021 10:12:18

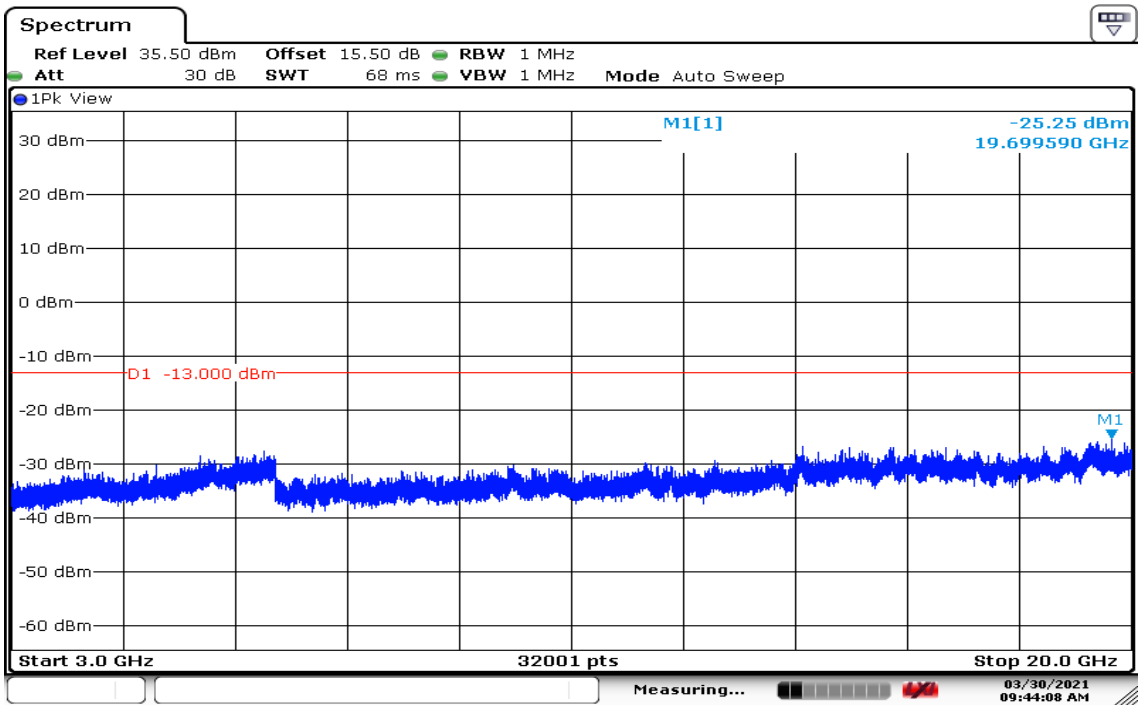
CHANNEL BANDWIDTH: 3MHz / 3GHz-20GHz

CH Low



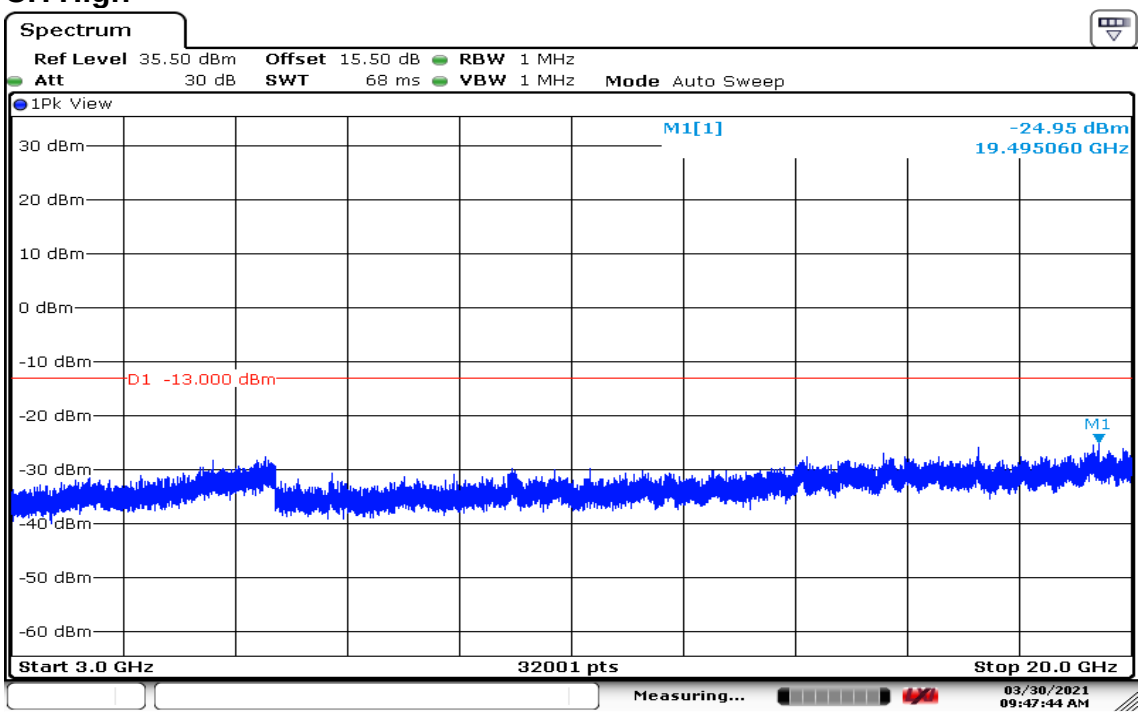
Date: 30.MAR.2021 09:43:52

CH Mid



Date: 30.MAR.2021 09:44:09

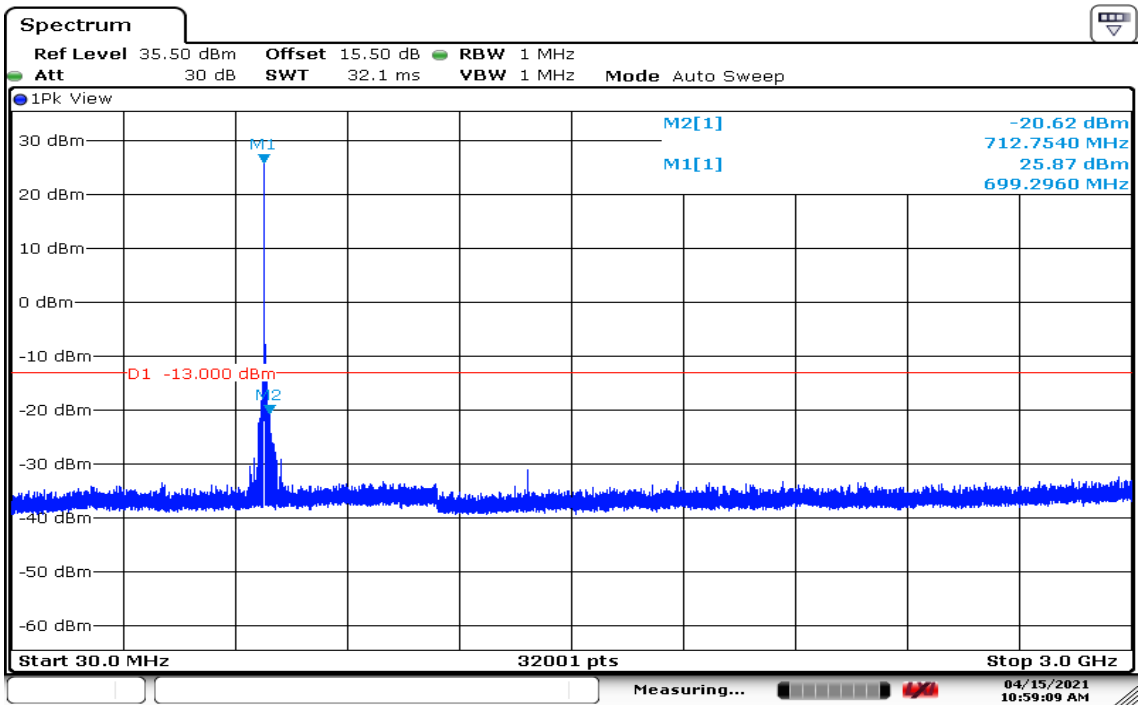
CH High



Date: 30.MAR.2021 09:47:45

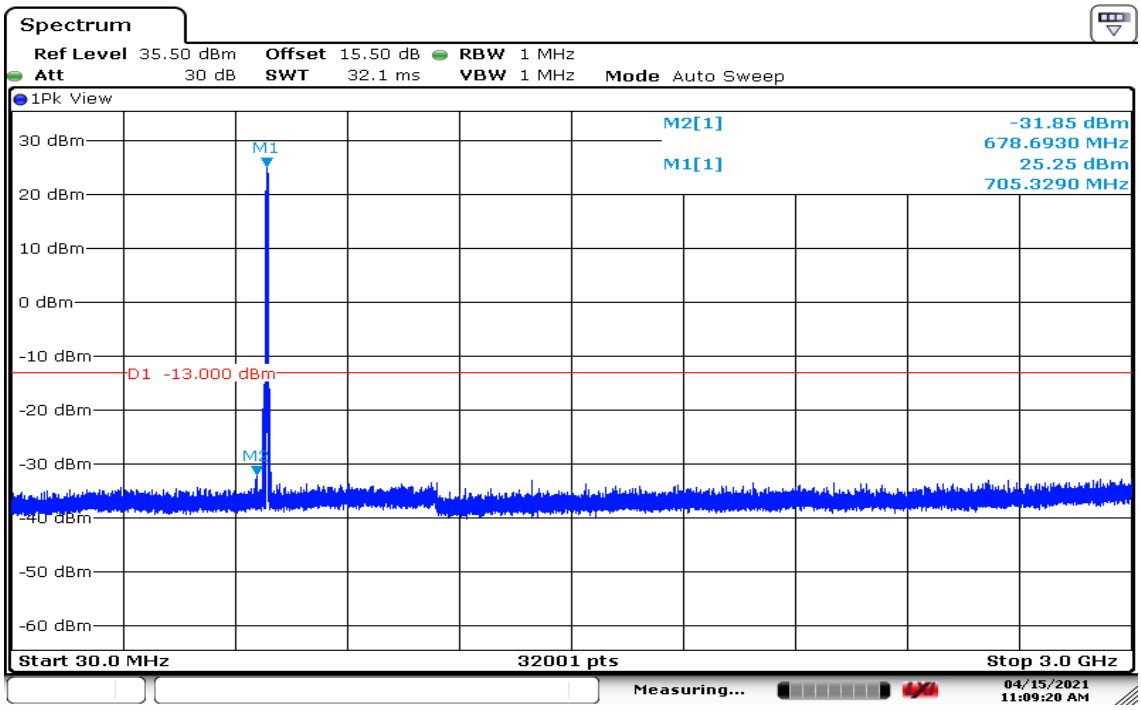
CHANNEL BANDWIDTH: 5MHz / 30MHz-3GHz

CH Low



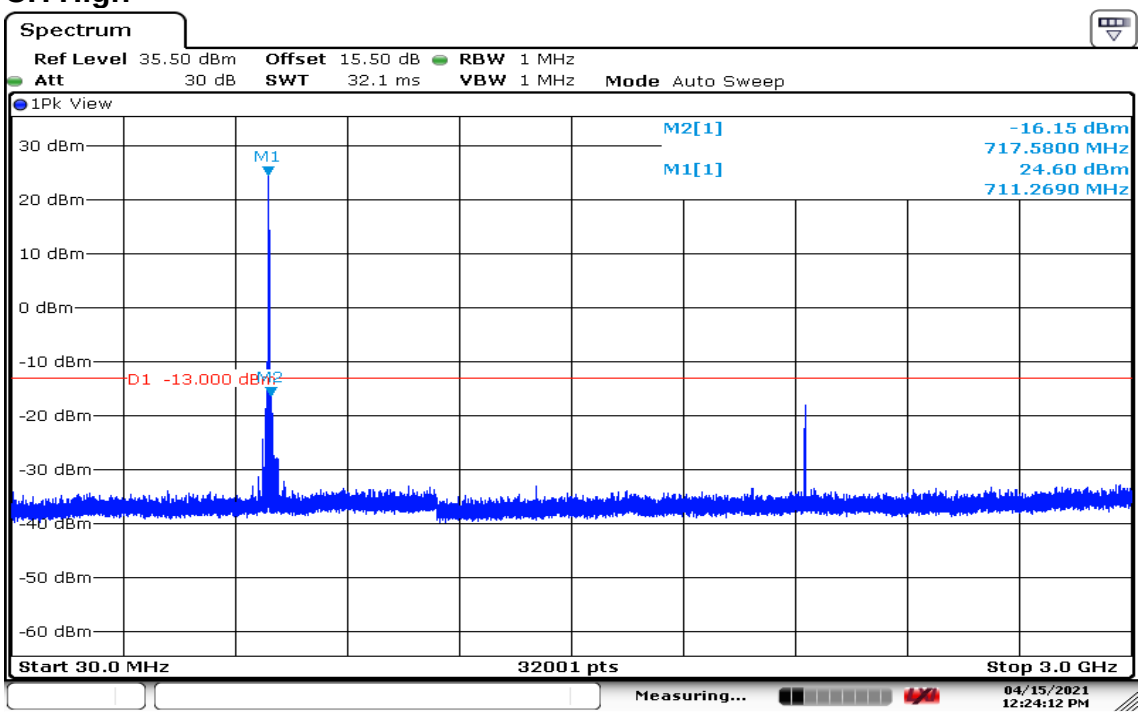
Date: 15.APR.2021 10:59:10

CH Mid



Date: 15.APR.2021 11:09:20

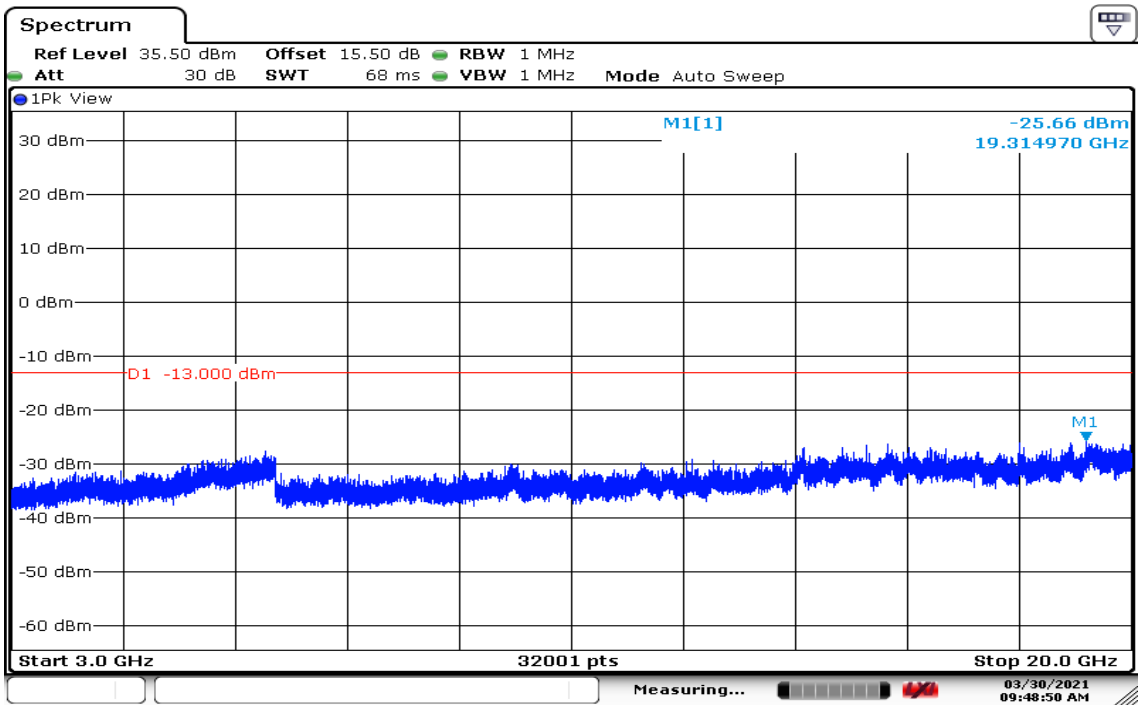
CH High



Date:15.APR.2021 12:24:13

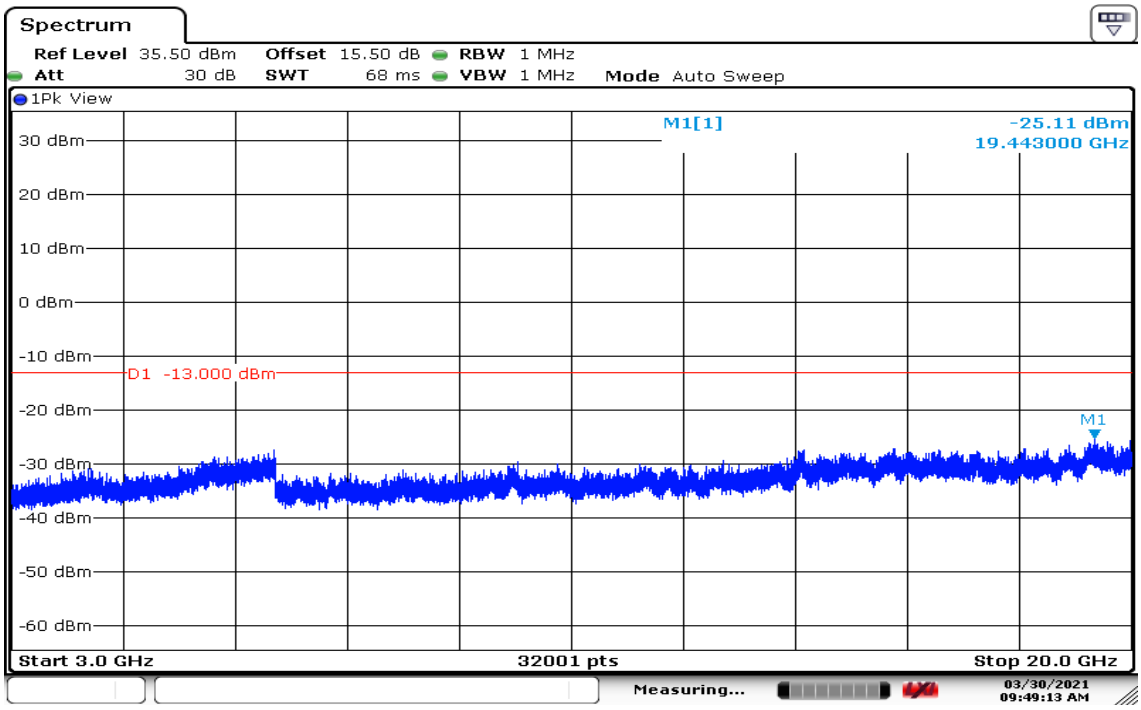
CHANNEL BANDWIDTH: 5MHz / 3GHz-20GHz

CH Low



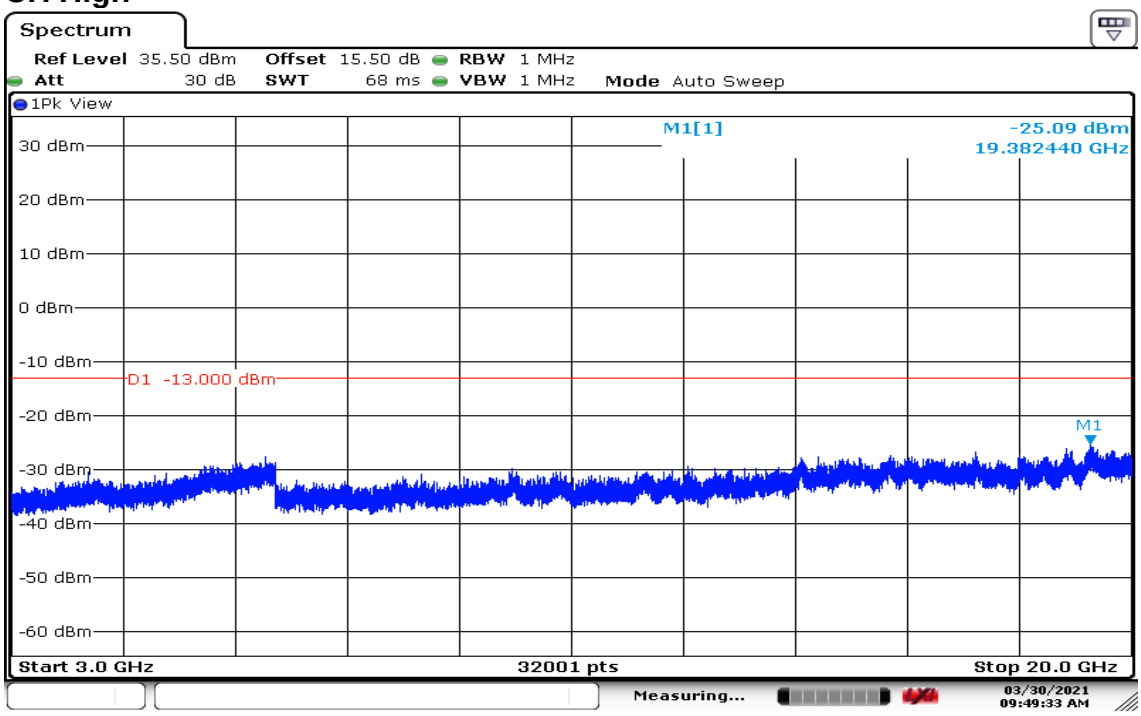
Date: 30.MAR.2021 09:48:51

CH Mid



Date: 30.MAR.2021 09:49:13

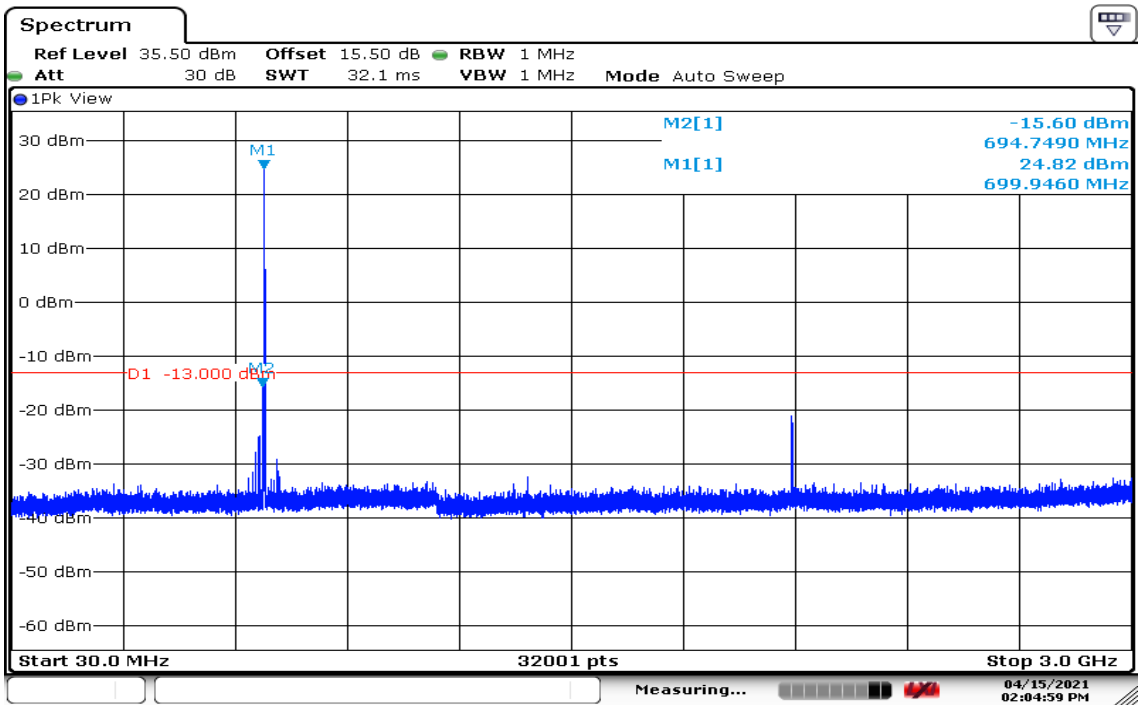
CH High



Date: 30.MAR.2021 09:49:33

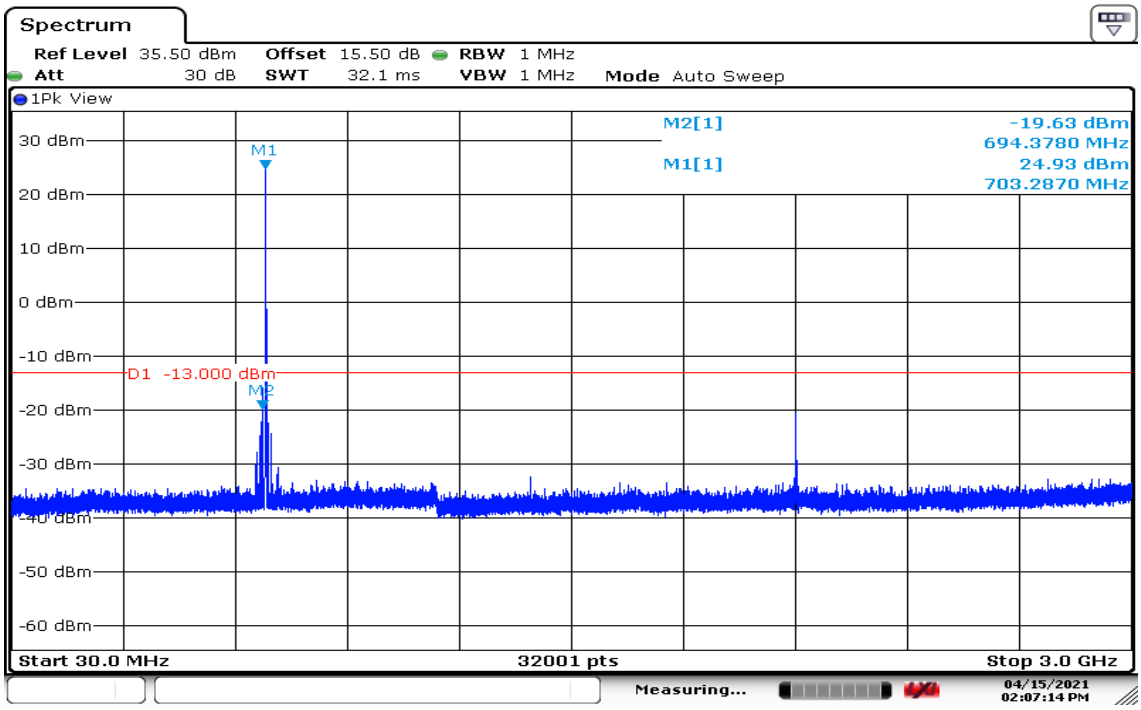
CHANNEL BANDWIDTH: 10MHz / 30MHz-3GHz

CH Low



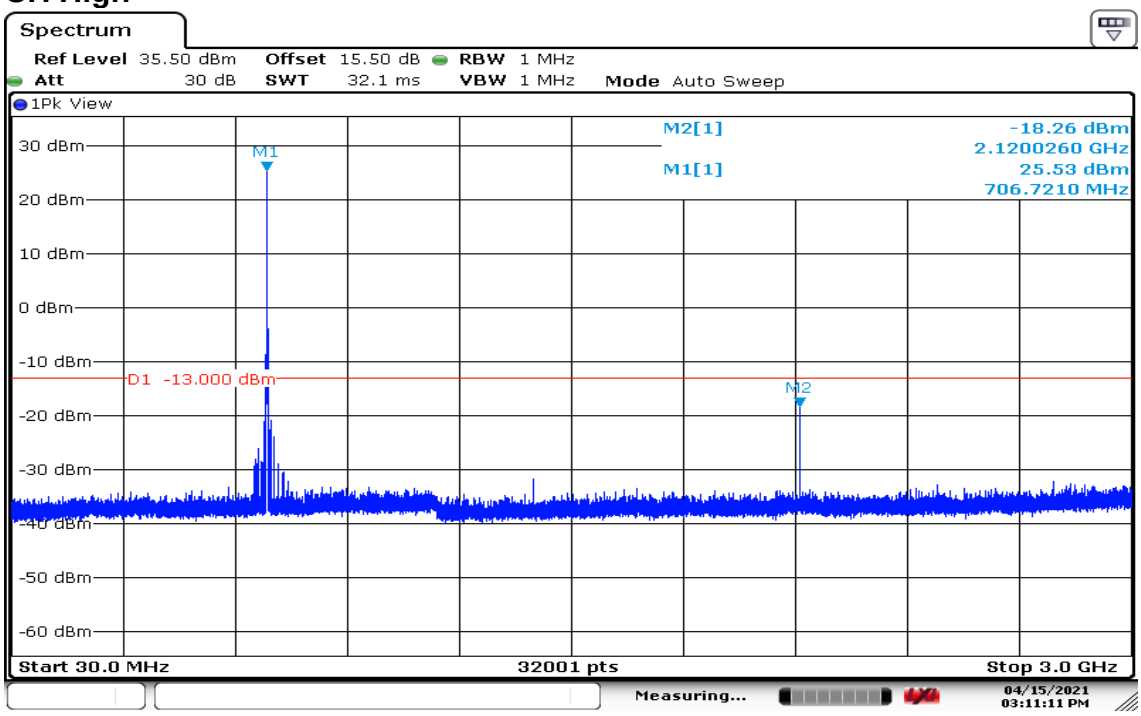
Date: 15.APR.2021 14:04:59

CH Mid



Date: 15.APR.2021 14:07:14

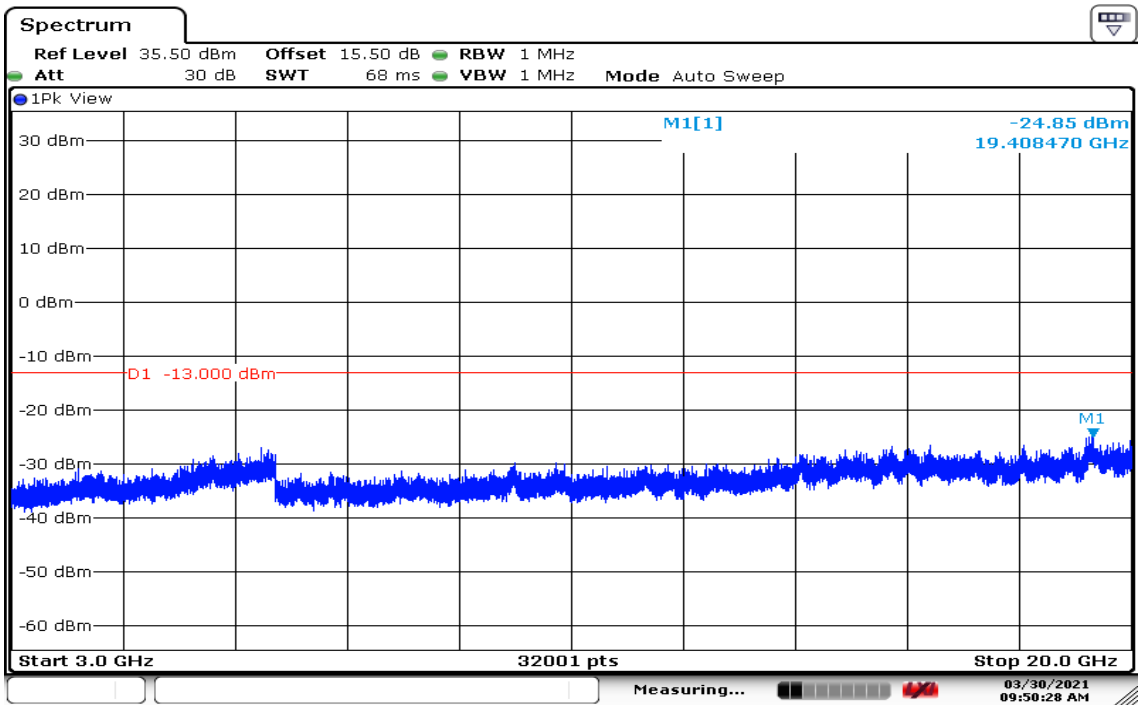
CH High



Date:15.APR.2021 15:11:11

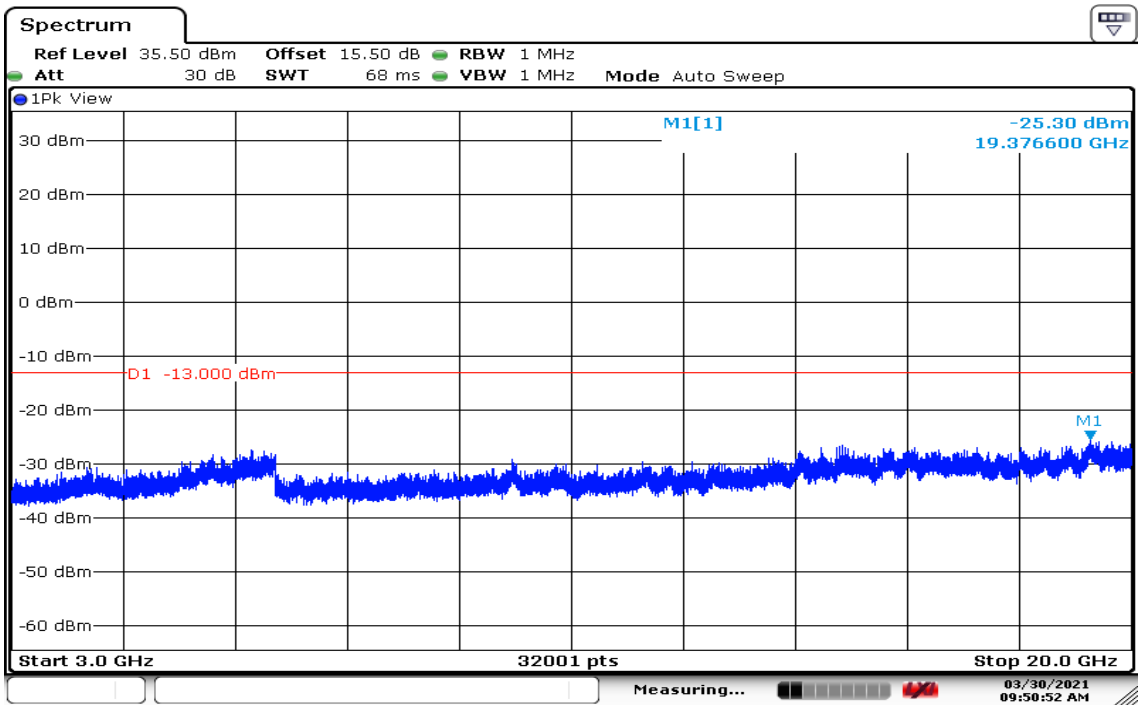
CHANNEL BANDWIDTH: 10MHz / 3GHz-20GHz

CH Low



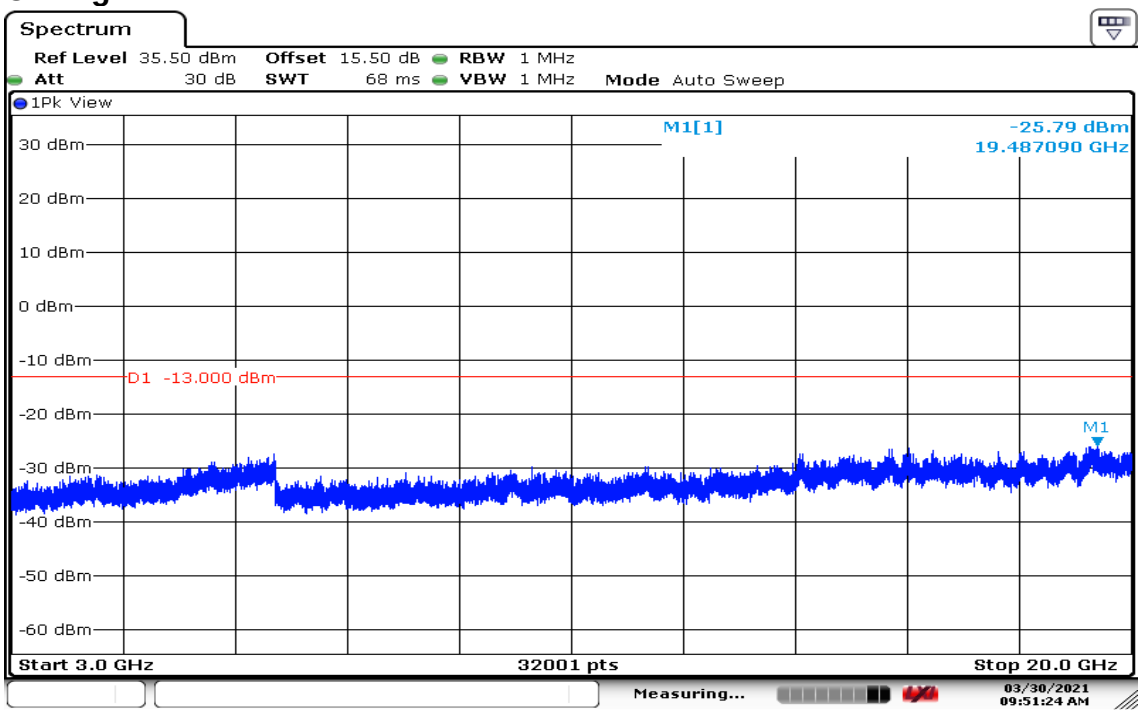
Date: 30.MAR.2021 09:50:28

CH Mid



Date: 30.MAR.2021 09:50:53

CH High



Date: 30.MAR.2021 09:51:24

8.7 RADIATED EMISSION MEASUREMENT

LIMITS

FCC §27.53(g), Band 12

(g) For operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least 43 + 10 log (P) dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

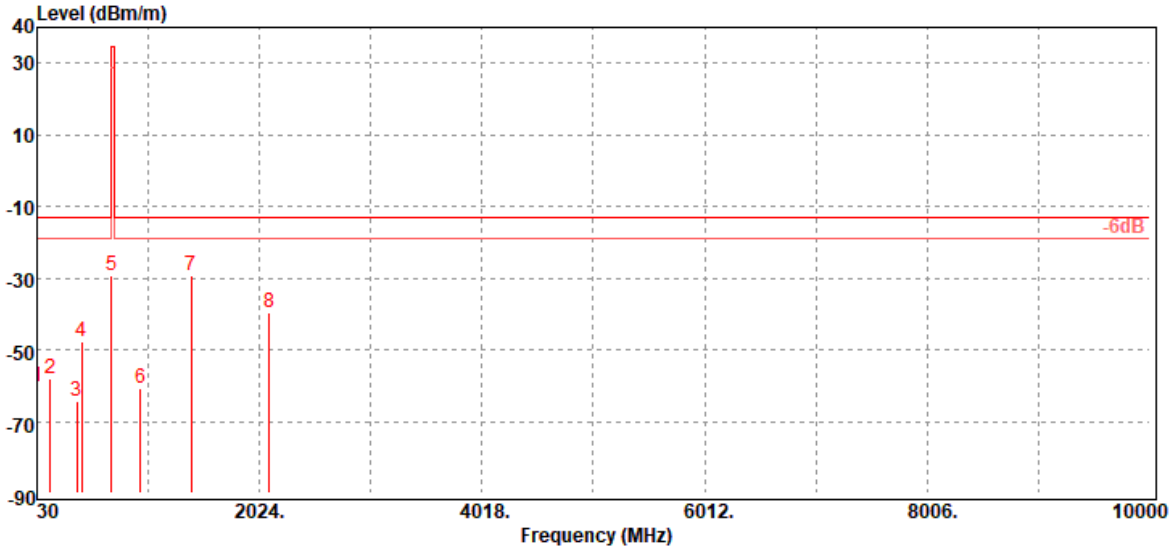
TEST PROCEDURES

1. According to KDB 971168 D01 and TIA-603-E.
2. The EUT was placed on a turntable
   (1) Below 1G : 0.8m
   (2) Above 1G : 1.5m
   (3) EUT set 3m from the receiving antenna
   (4) The table was rotated 360 degrees of the highest spurious emission to determine the position.
3. Set the spectrum analyzer , RBW=1MHz, VBW=3MHz.
4. A horn antenna was driven by a signal generator.
5. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.

Test Results

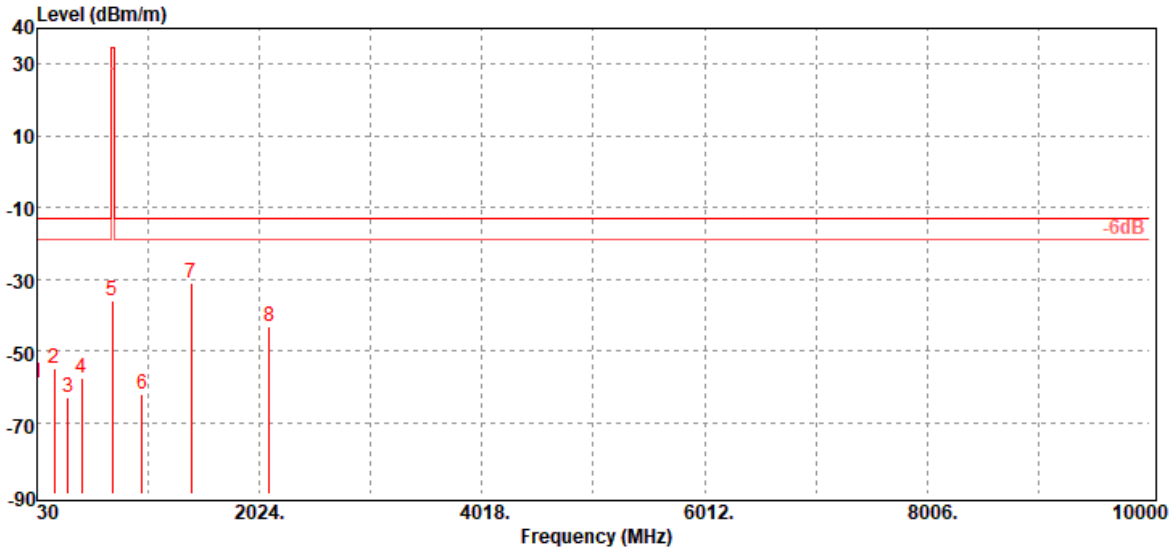
LTE Band 12 / BW: 20MHz / QPSK / RB =6, RB Offset = 0

Operation Mode:	Tx / Low CH	**Test Date:**	April 21, 2021
Temperature:	22.4℃	**Tested by:**	Ray Li
Humidity:	53% RH	**Polarity:**	Ver.



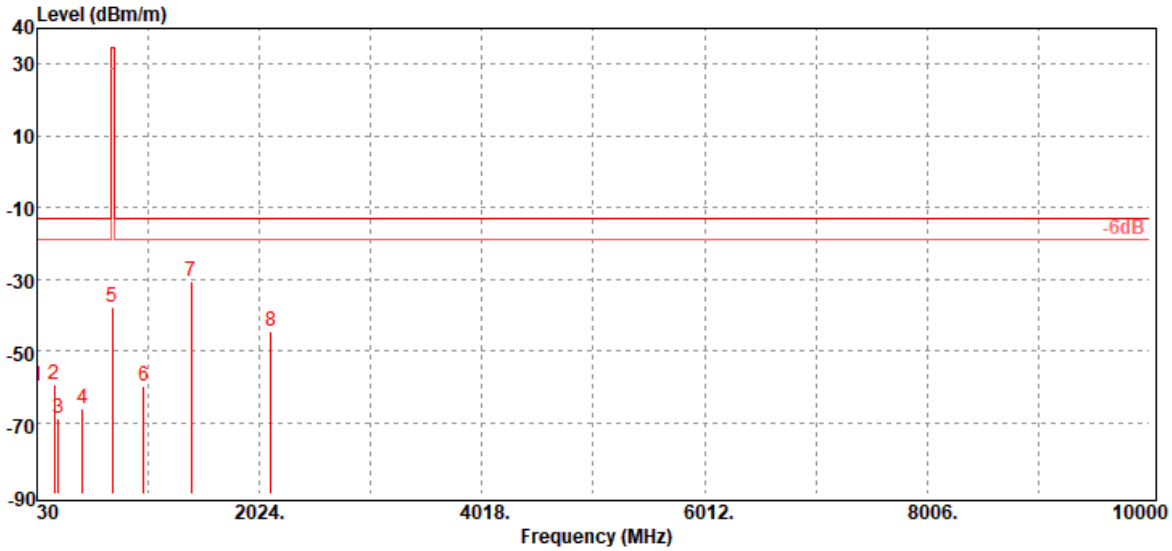
Freq. MHz	ERP/EIRP dBm	SG Output Level dBm	Antenna Gain dBd/dBi	Cable Loss dB	Limit dBm	Margin dB	Antenna Polarization (V/H)
34.85	-60.21	-34.41	-25.32	-0.48	-13.00	-47.21	V
149.31	-57.98	-49.81	-7.17	-1.00	-13.00	-44.98	V
388.90	-64.44	-61.41	-1.40	-1.63	-13.00	-51.44	V
430.61	-47.72	-44.09	-1.91	-1.72	-13.00	-34.72	V
699.30	-29.49	-25.86	-1.40	-2.23	34.77	-64.26	V
959.26	-60.94	-57.02	-1.29	-2.63	-13.00	-47.94	V
1408.00	-29.21	-34.01	8.05	-3.25	-13.00	-16.21	V
2112.00	-39.79	-45.38	9.70	-4.11	-13.00	-26.79	V

Operation Mode:	Tx / Low CH	**Test Date:**	April 21, 2021
Temperature:	22.4℃	**Tested by:**	Ray Li
Humidity:	53% RH	**Polarity:**	Hor.



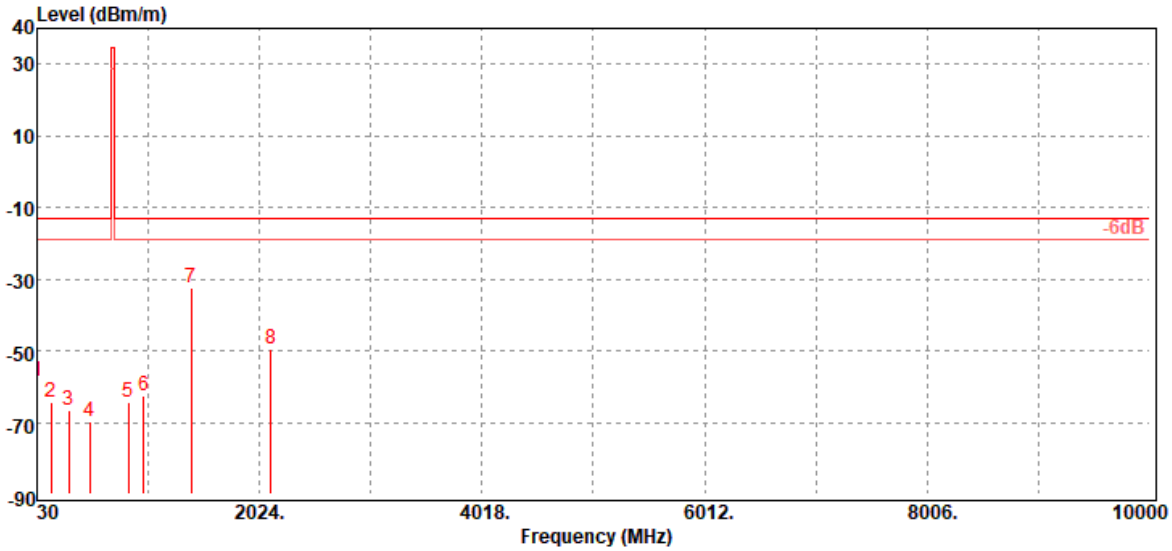
Freq. MHz	ERP/EIRP dBm	SG Output Level dBm	Antenna Gain dBd/dBi	Cable Loss dB	Limit dBm	Margin dB	Antenna Polarization (V/H)
31.94	-59.01	-30.38	-28.16	-0.47	-13.00	-46.01	H
187.14	-54.95	-49.83	-3.99	-1.13	-13.00	-41.95	H
309.36	-63.03	-59.59	-1.99	-1.45	-13.00	-50.03	H
430.61	-57.52	-53.89	-1.91	-1.72	-13.00	-44.52	H
707.06	-35.97	-32.27	-1.46	-2.24	34.77	-70.74	H
973.81	-62.17	-58.15	-1.38	-2.64	-13.00	-49.17	H
1408.00	-30.86	-35.66	8.05	-3.25	-13.00	-17.86	H
2112.00	-43.23	-48.82	9.70	-4.11	-13.00	-30.23	H

Operation Mode:	Tx / Mid CH	**Test Date:**	April 21, 2021
Temperature:	22.4℃	**Tested by:**	Ray Li
Humidity:	53% RH	**Polarity:**	Ver.



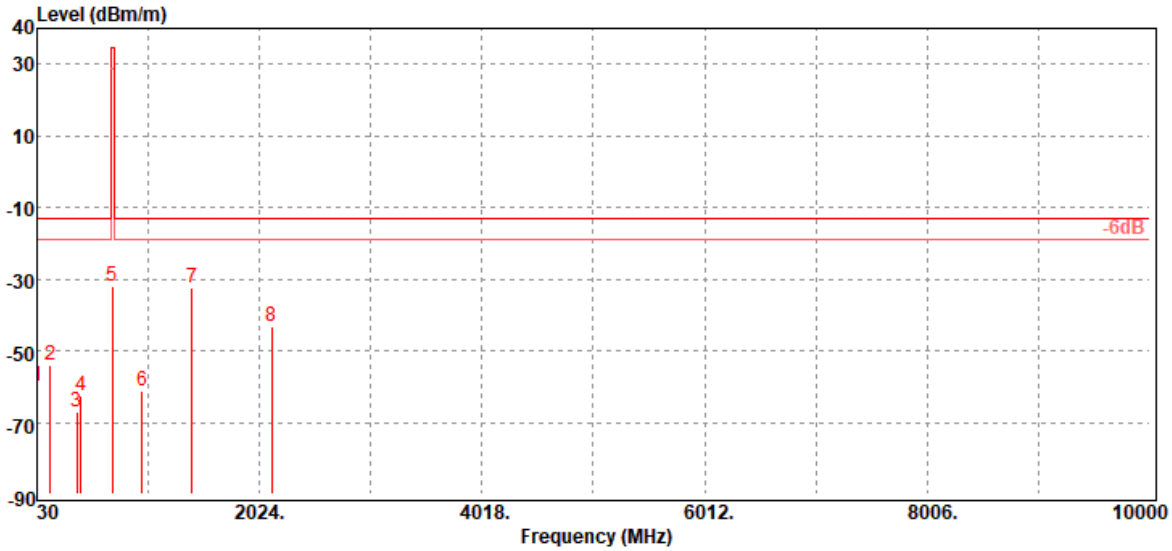
Freq. MHz	ERP/EIRP dBm	SG Output Level dBm	Antenna Gain dBd/dBi	Cable Loss dB	Limit dBm	Margin dB	Antenna Polarization (V/H)
34.85	-59.64	-33.84	-25.32	-0.48	-13.00	-46.64	V
187.14	-59.25	-54.13	-3.99	-1.13	-13.00	-46.25	V
224.00	-68.70	-65.55	-1.92	-1.23	-13.00	-55.70	V
437.40	-66.21	-62.43	-2.05	-1.73	-13.00	-53.21	V
704.15	-37.63	-33.92	-1.48	-2.23	34.77	-72.40	V
988.36	-59.71	-55.65	-1.40	-2.66	-13.00	-46.71	V
1415.00	-30.54	-35.38	8.09	-3.25	-13.00	-17.54	V
2122.50	-44.56	-50.06	9.62	-4.12	-13.00	-31.56	V

Operation Mode:	Tx / Mid CH	**Test Date:**	April 21, 2021
Temperature:	22.4℃	**Tested by:**	Ray Li
Humidity:	53% RH	**Polarity:**	Hor.



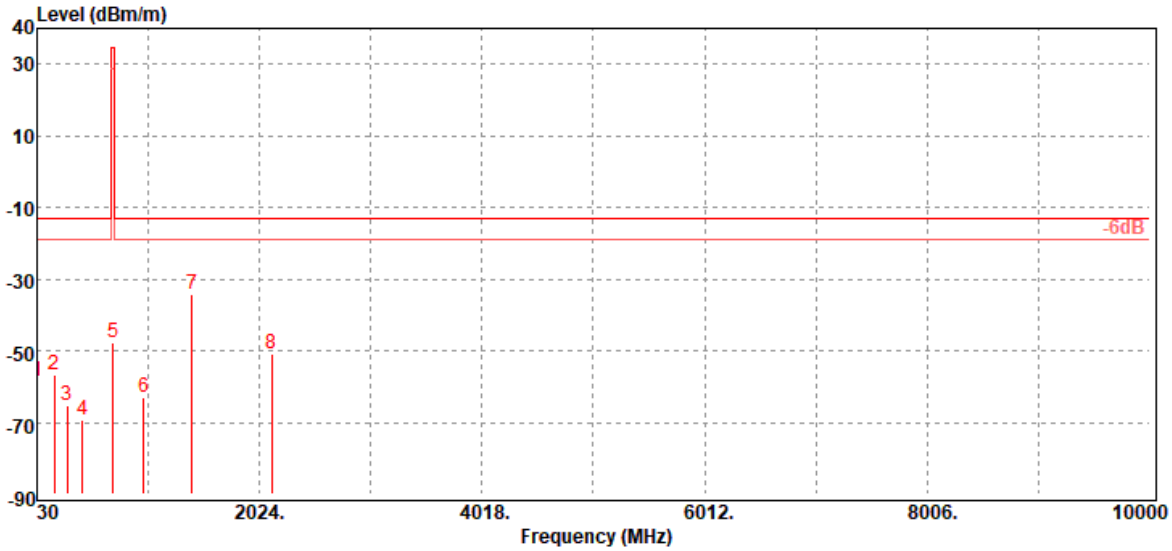
Freq. MHz	ERP/EIRP dBm	SG Output Level dBm	Antenna Gain dBd/dBi	Cable Loss dB	Limit dBm	Margin dB	Antenna Polarization (V/H)
31.94	-58.61	-29.98	-28.16	-0.47	-13.00	-45.61	H
154.16	-64.31	-56.51	-6.78	-1.02	-13.00	-51.31	H
318.09	-66.58	-63.22	-1.88	-1.48	-13.00	-53.58	H
500.45	-69.81	-65.95	-1.99	-1.87	-13.00	-56.81	H
847.71	-64.55	-60.75	-1.35	-2.45	-13.00	-51.55	H
988.36	-62.53	-58.47	-1.40	-2.66	-13.00	-49.53	H
1415.00	-32.50	-37.34	8.09	-3.25	-13.00	-19.50	H
2122.50	-49.39	-54.89	9.62	-4.12	-13.00	-36.39	H

Operation Mode:	Tx / High CH	**Test Date:**	April 21, 2021
Temperature:	22.4℃	**Tested by:**	Ray Li
Humidity:	53% RH	**Polarity:**	Ver.



Freq. MHz	ERP/EIRP dBm	SG Output Level dBm	Antenna Gain dBd/dBi	Cable Loss dB	Limit dBm	Margin dB	Antenna Polarization (V/H)
34.85	-60.03	-34.23	-25.32	-0.48	-13.00	-47.03	V
149.31	-54.20	-46.03	-7.17	-1.00	-13.00	-41.20	V
388.90	-67.01	-63.98	-1.40	-1.63	-13.00	-54.01	V
425.76	-62.50	-58.89	-1.90	-1.71	-13.00	-49.50	V
707.06	-31.78	-28.08	-1.46	-2.24	34.77	-66.55	V
968.96	-61.26	-57.32	-1.30	-2.64	-13.00	-48.26	V
1422.00	-32.60	-37.47	8.13	-3.26	-13.00	-19.60	V
2133.00	-43.37	-48.77	9.54	-4.14	-13.00	-30.37	V

Operation Mode:	Tx / High CH	**Test Date:**	April 21, 2021
Temperature:	22.4℃	**Tested by:**	Ray Li
Humidity:	53% RH	**Polarity:**	Hor.



Freq. MHz	ERP/EIRP dBm	SG Output Level dBm	Antenna Gain dBd/dBi	Cable Loss dB	Limit dBm	Margin dB	Antenna Polarization (V/H)
32.91	-58.67	-31.01	-27.19	-0.47	-13.00	-45.67	H
187.14	-56.91	-51.79	-3.99	-1.13	-13.00	-43.91	H
298.69	-65.45	-61.99	-2.03	-1.43	-13.00	-52.45	H
437.40	-69.23	-65.45	-2.05	-1.73	-13.00	-56.23	H
709.00	-47.81	-44.15	-1.42	-2.24	34.77	-82.58	H
988.36	-62.95	-58.89	-1.40	-2.66	-13.00	-49.95	H
1422.00	-34.31	-39.18	8.13	-3.26	-13.00	-21.31	H
2133.00	-50.83	-56.23	9.54	-4.14	-13.00	-37.83	H

- End of Test Report -