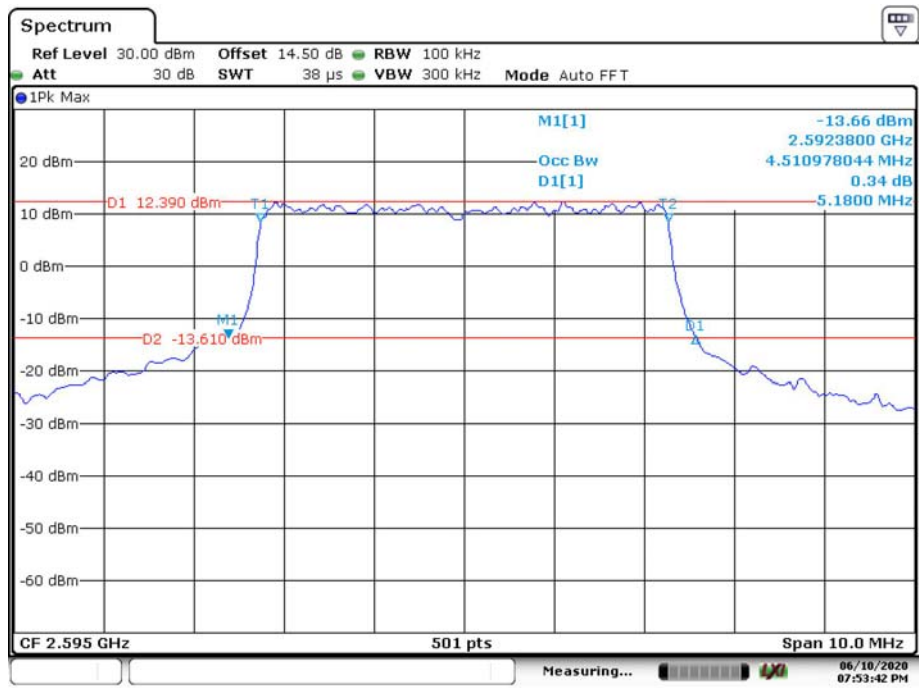


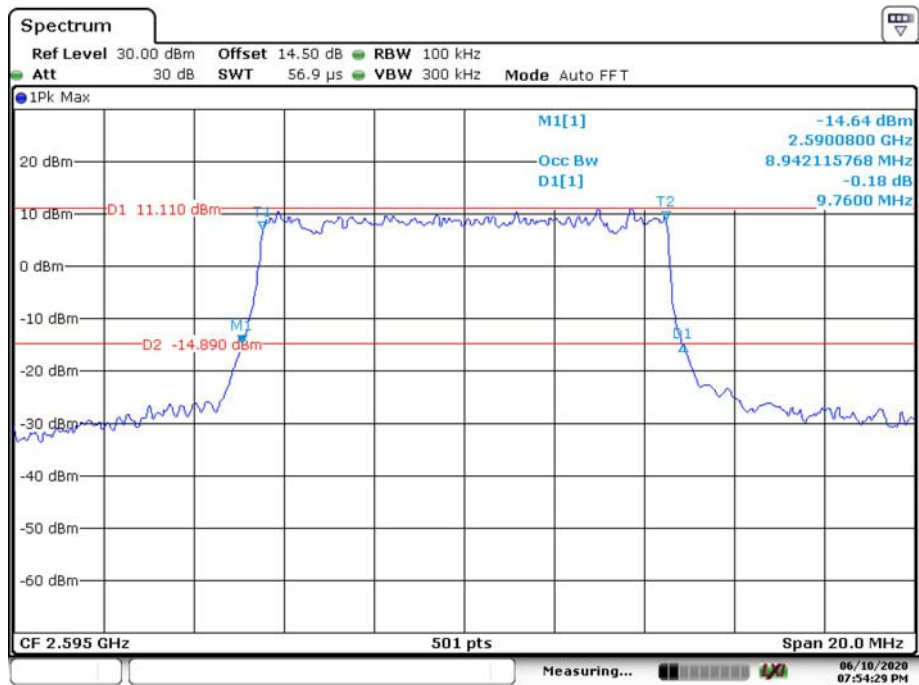
LTE Band 38:

QPSK_5 MHz



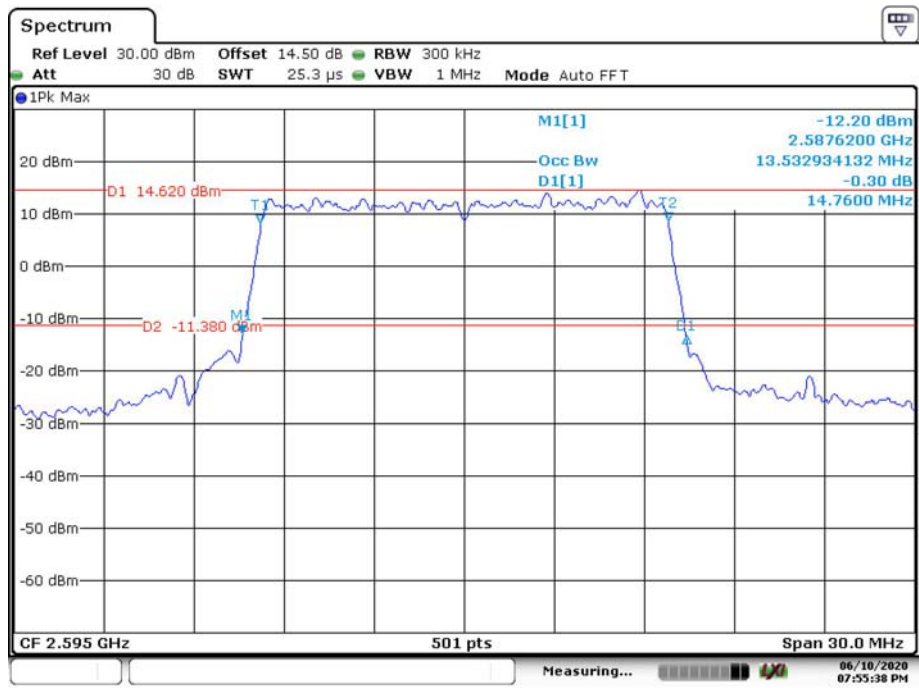
Date: 10.JUN.2020 19:53:43

QPSK_10 MHz



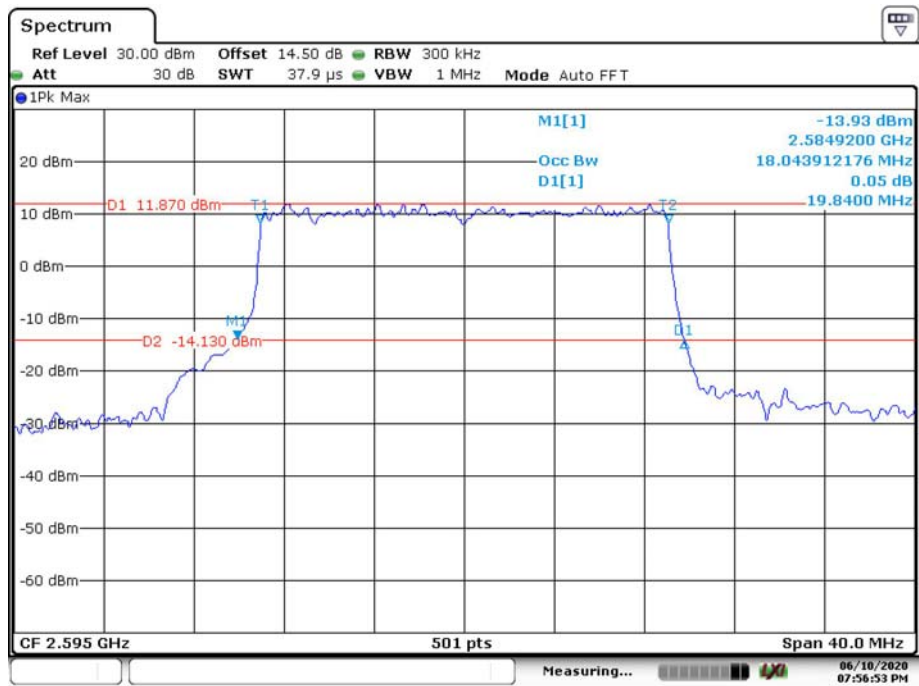
Date: 10.JUN.2020 19:54:30

QPSK_15 MHz



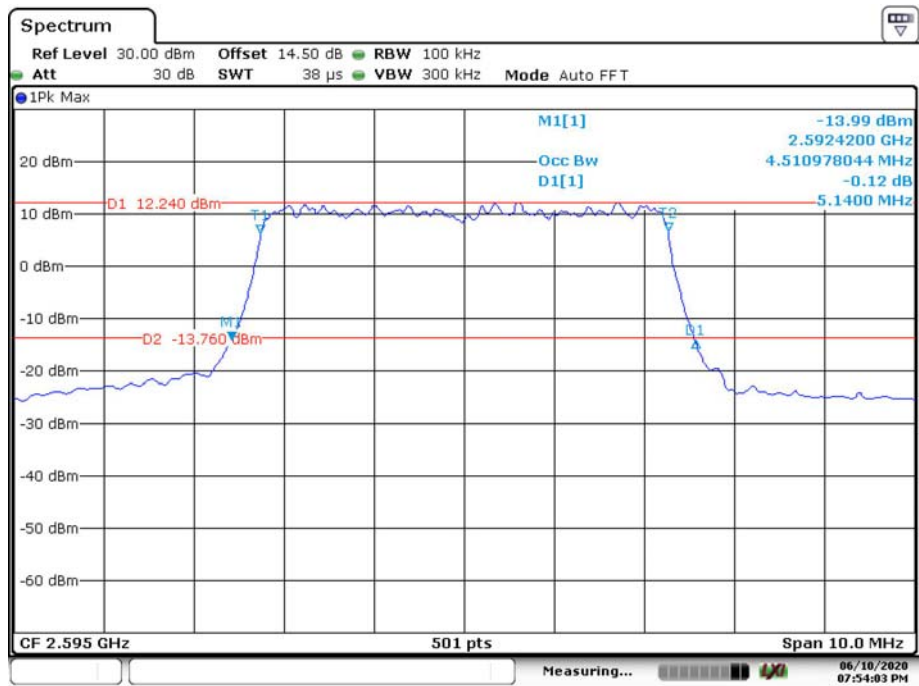
Date: 10.JUN.2020 19:55:39

QPSK_20 MHz

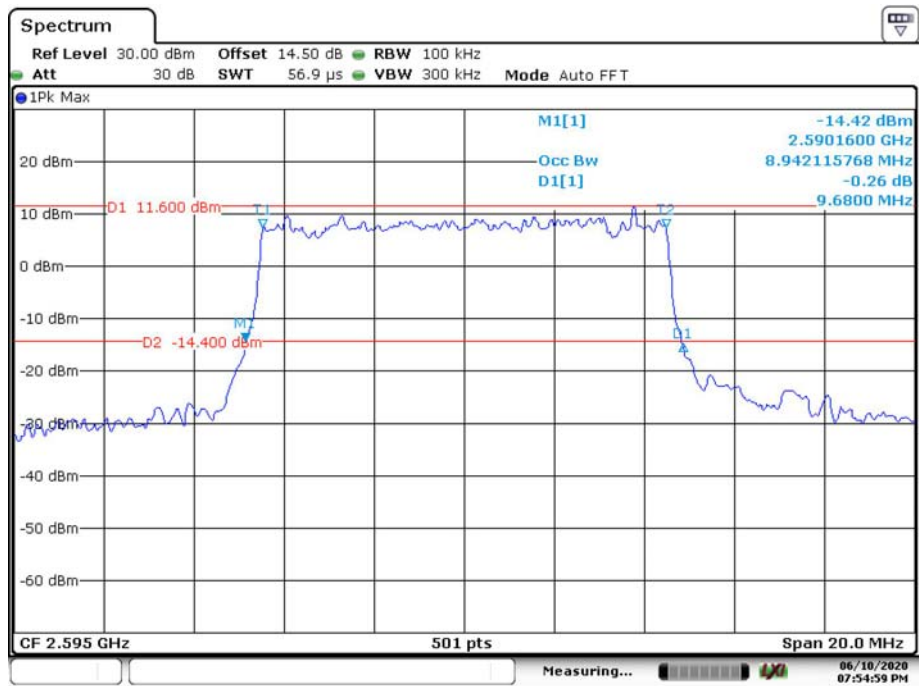


Date: 10.JUN.2020 19:56:54

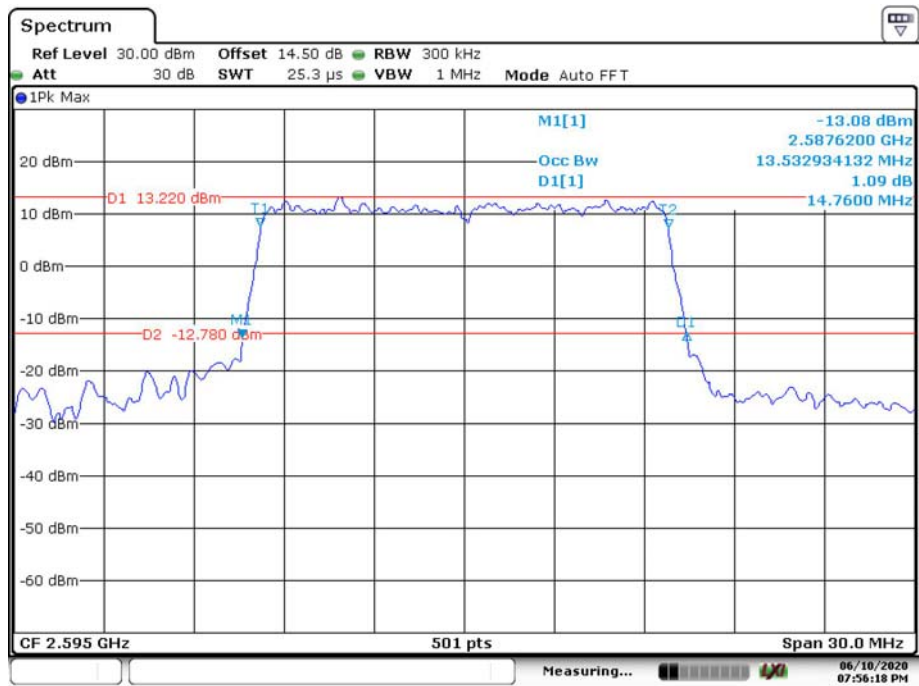
16QAM_5 MHz



16QAM_10 MHz

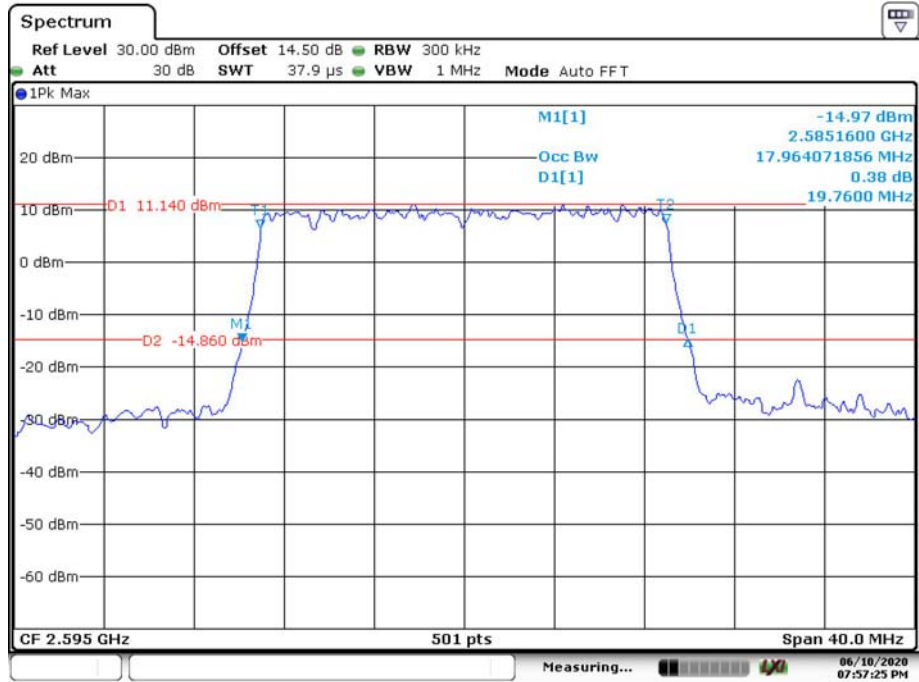


16QAM_15 MHz



Date: 10.JUN.2020 19:56:18

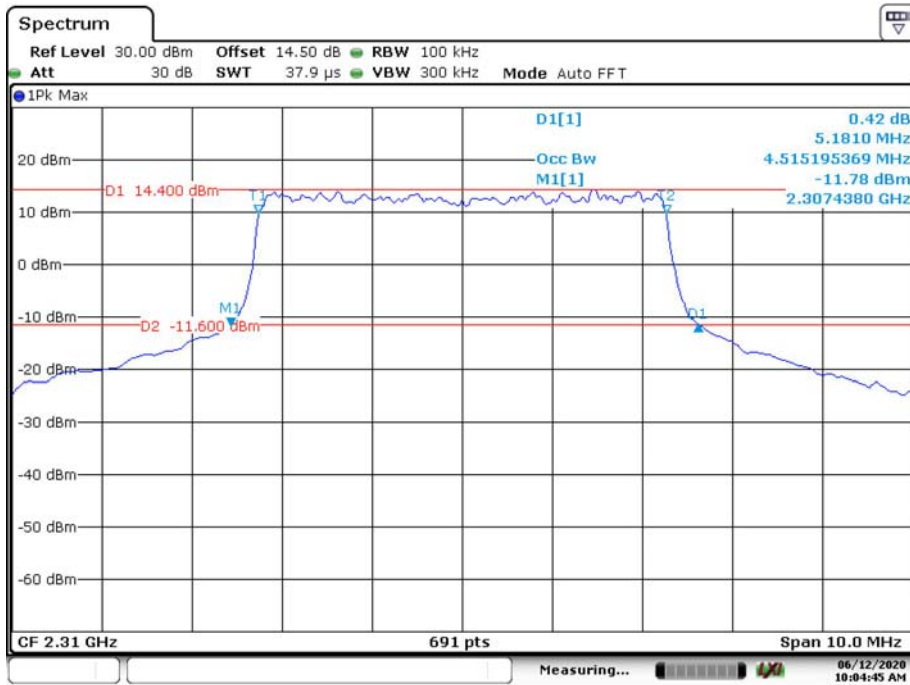
16QAM_20 MHz



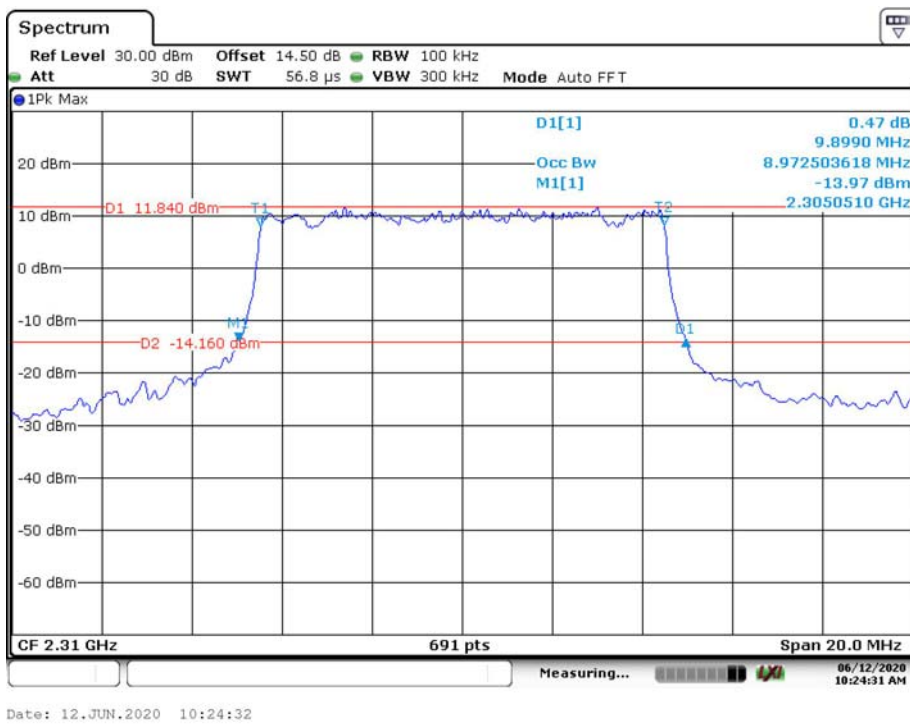
Date: 10.JUN.2020 19:57:26

LTE Band 40
Lower:

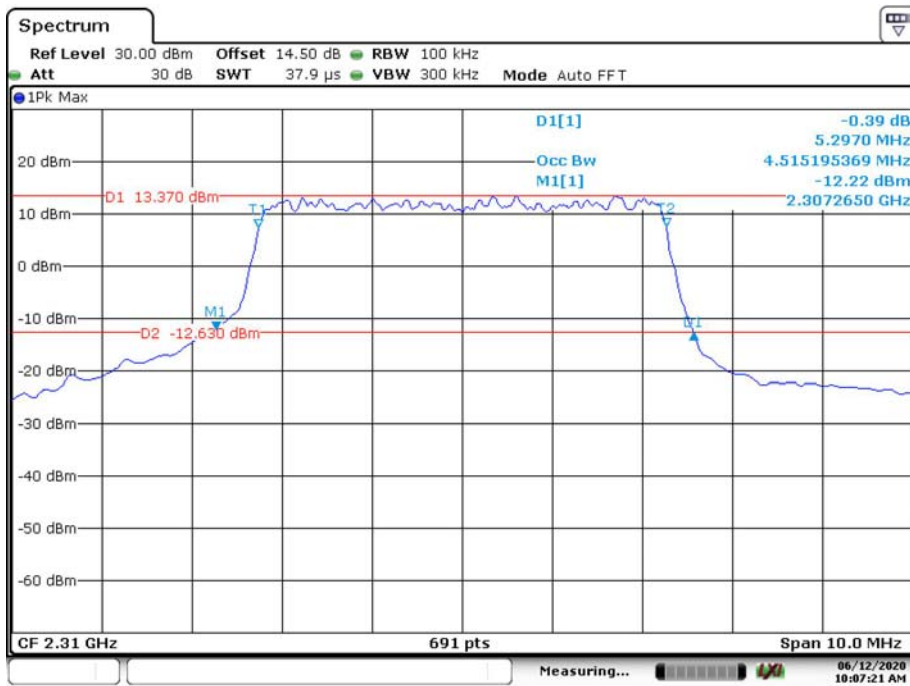
QPSK_5 MHz



QPSK_10 MHz

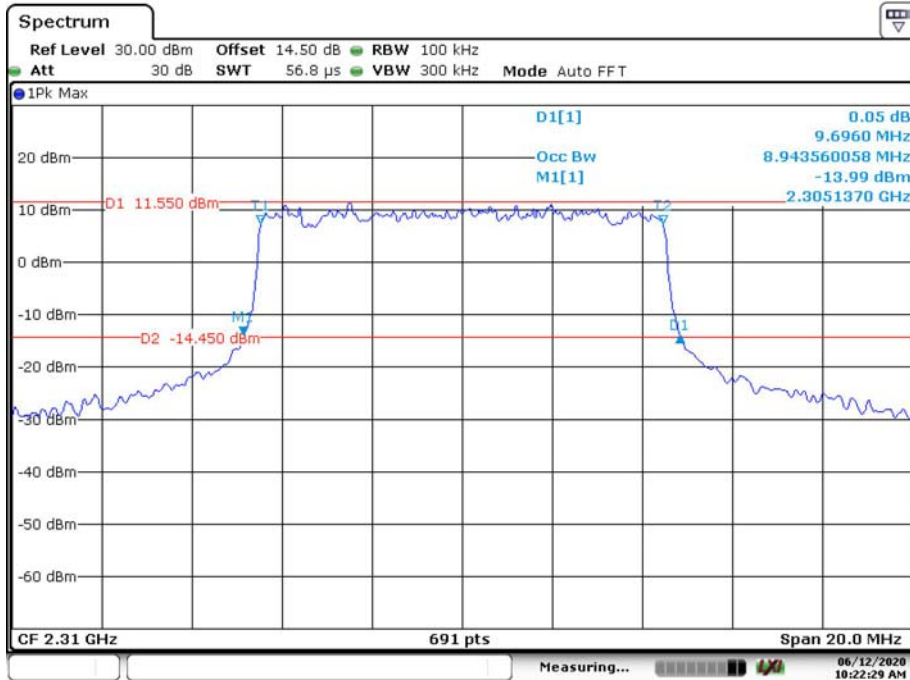


16QAM_5 MHz



Date: 12.JUN.2020 10:07:22

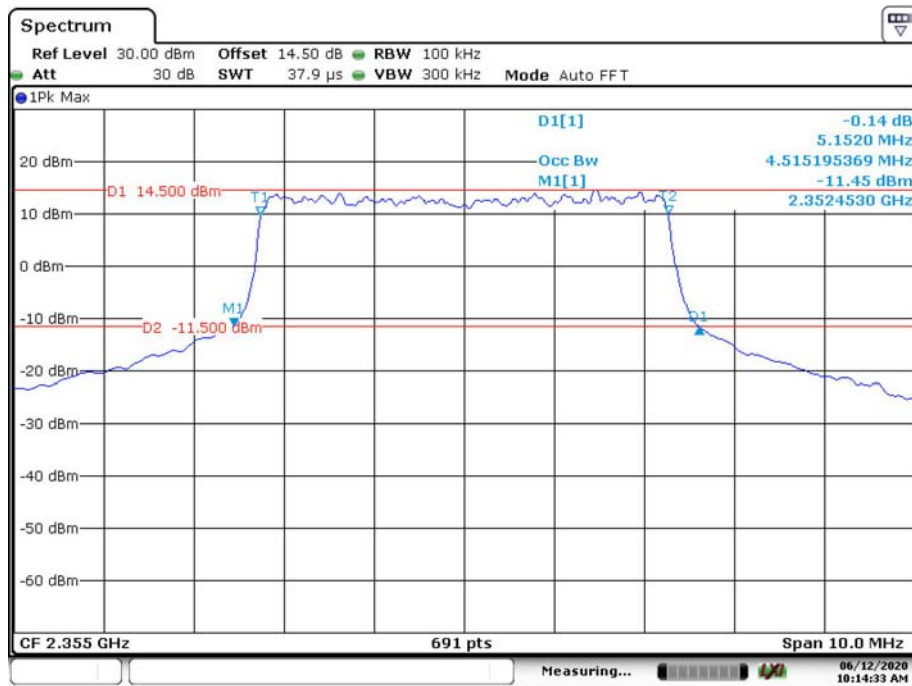
16QAM_10 MHz



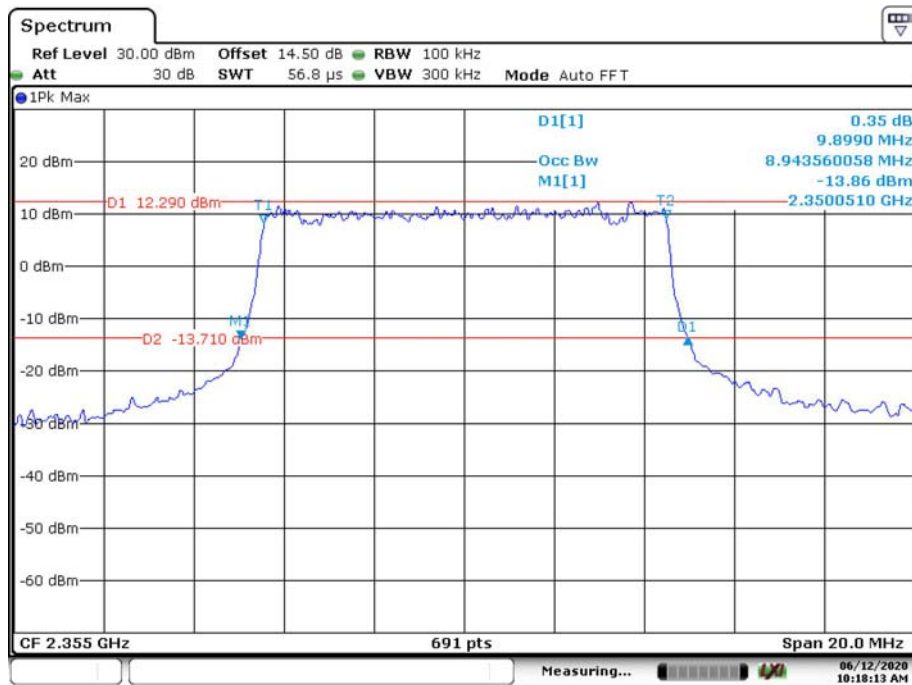
Date: 12.JUN.2020 10:22:30

Upper:

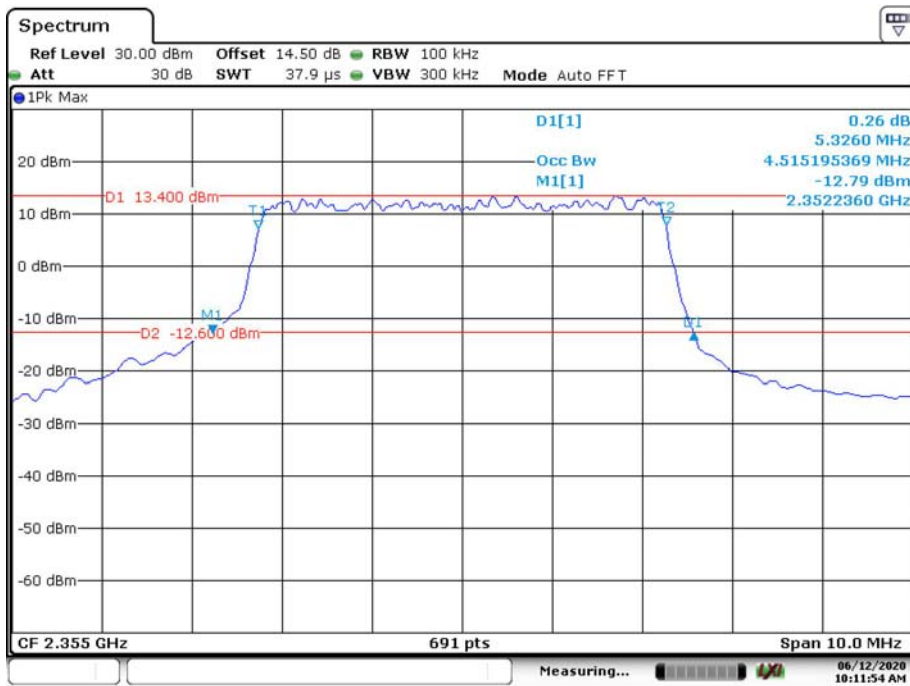
QPSK_5 MHz



QPSK_10 MHz

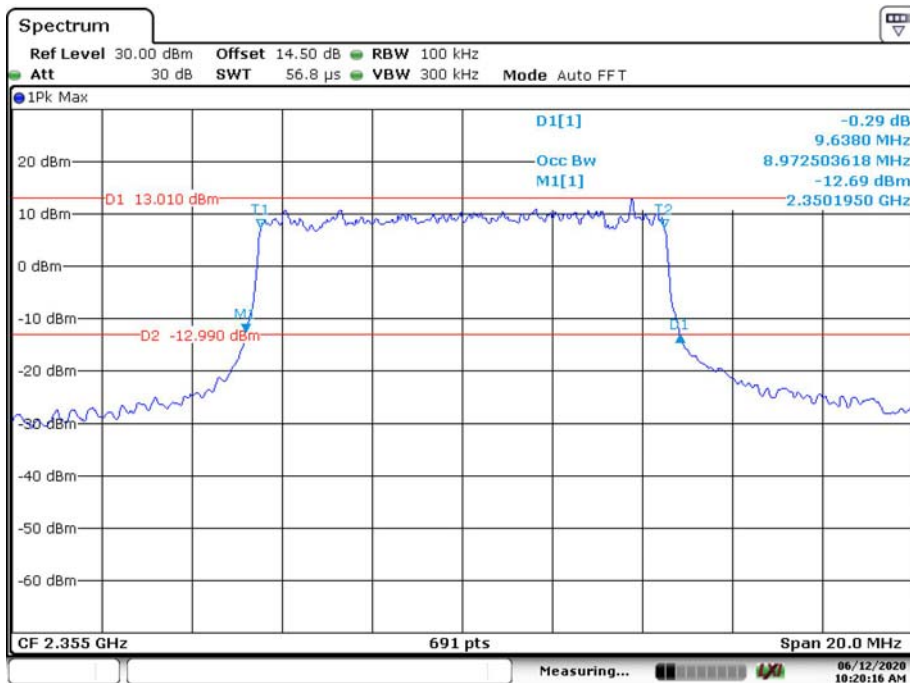


16QAM_5 MHz



Date: 12.JUN.2020 10:11:55

16QAM_10 MHz



Date: 12.JUN.2020 10:20:16

FCC §2.1051, §22.917(a) & §24.238(a) & §27.53- SPURIOUS EMISSIONS AT ANTENNA TERMINALS

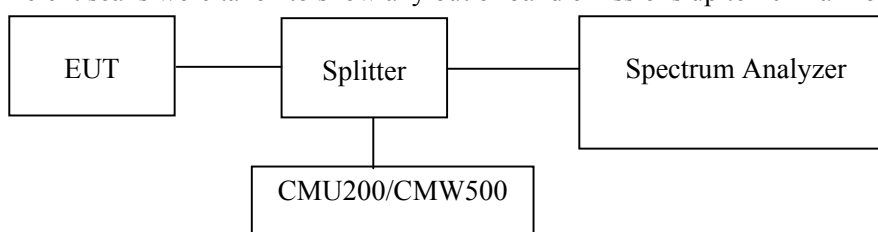
Applicable Standard

FCC §2.1051, §22.917(a) , §24.238(a) and §27.53.

The spectrum was to be investigated to the tenth harmonics of the highest fundamental frequency as specified in § 2.1051.

Test Procedure

The RF output of the transceiver was connected to a spectrum analyzer and simulator through appropriate attenuation. Sufficient scans were taken to show any out of band emissions up to 10th harmonic.



Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40	101474	2020-01-09	2021-01-09
Unknown	Coaxial Cable	C-SJ00-0010	C0010/04	Each time	N/A
E-Microwave	Blocking Control	EMDCB-00036	0E01201048	Each time	N/A
E-Microwave	Coaxial Attenuators	EMCA10-5RN-6	0E01203239	Each time	N/A
E-Microwave	Two-way Splitter	ODP-1-6-2S	0E0120142	Each time	N/A

* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

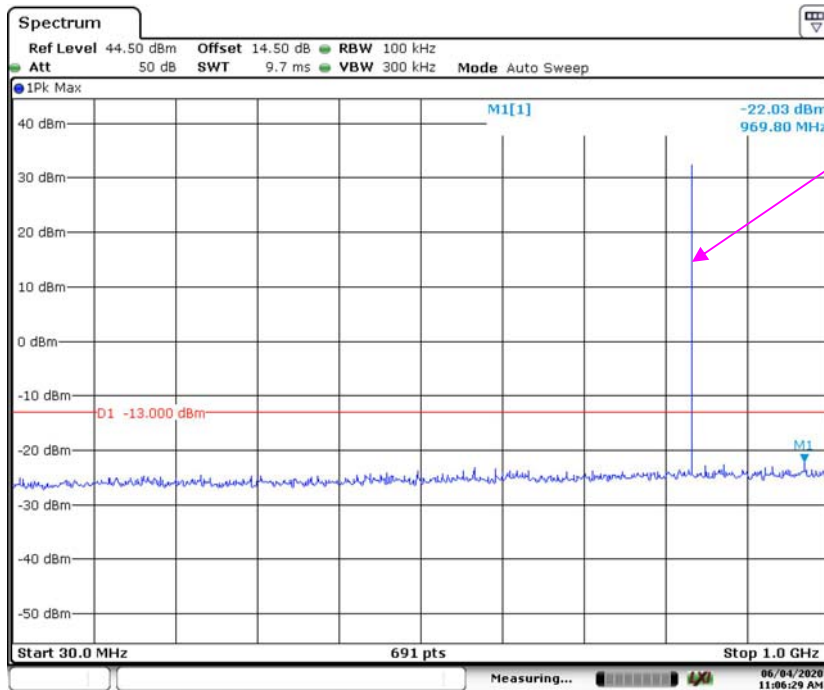
Test Data

Environmental Conditions

Temperature:	26.1~27.4 °C
Relative Humidity:	66 ~ 73%
ATM Pressure:	99.8~100.9kPa
Tester:	Rita Huang
Test Date:	2020-06-04~2020-06-12

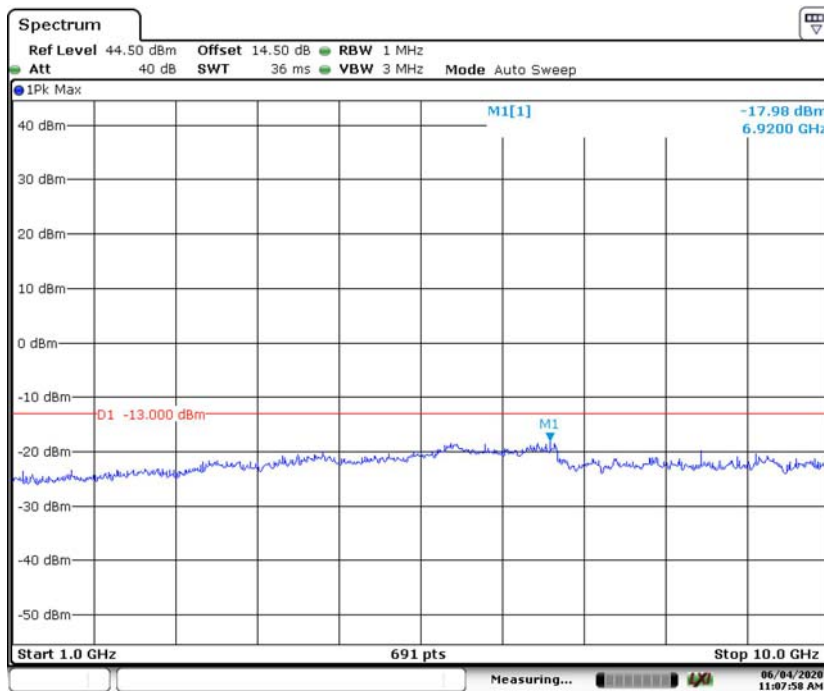
Test Result: Compliance. Please refer to the following plots.

GSM850 Middle Channel



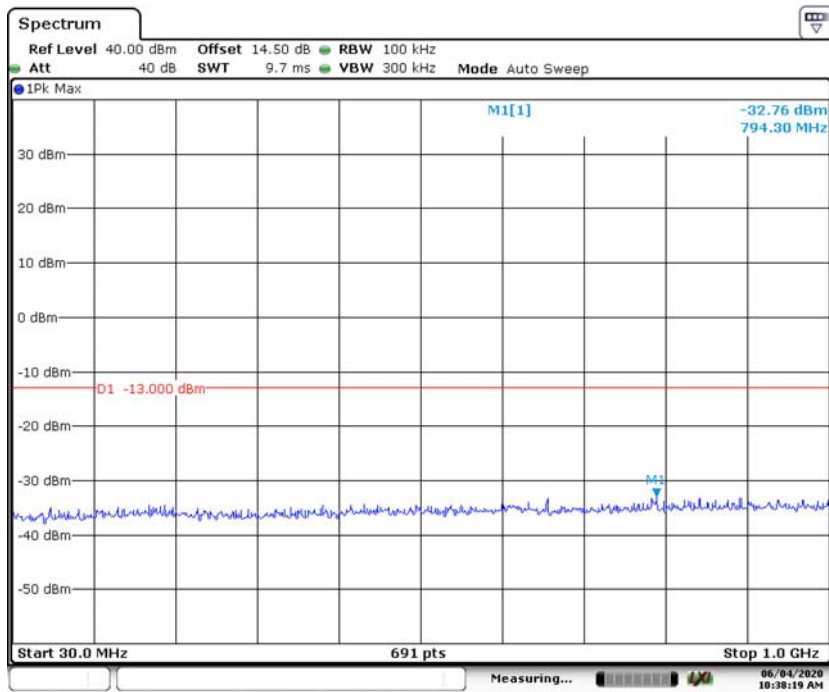
Fundamental

Date: 4.JUN.2020 11:06:30



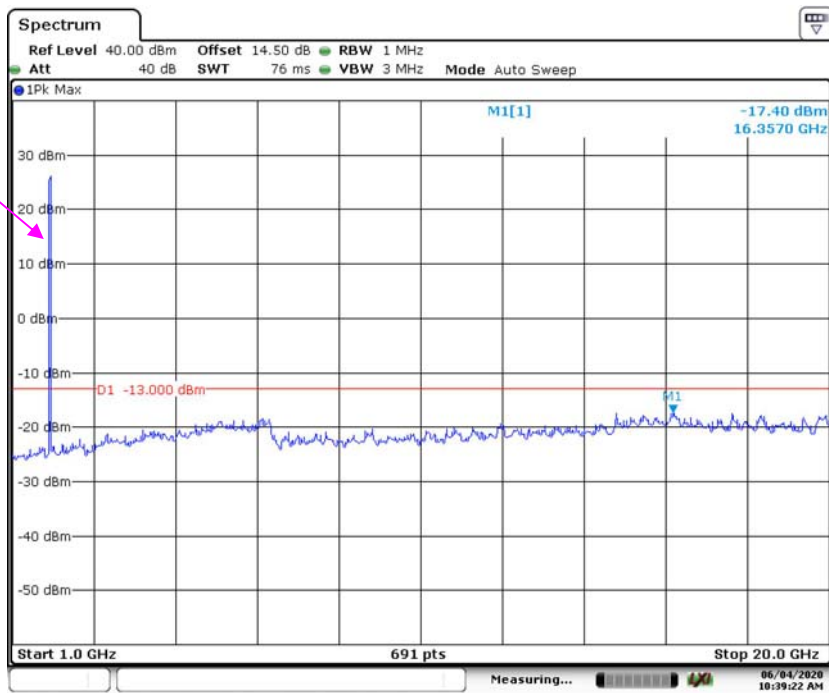
Date: 4.JUN.2020 11:07:58

PCS 1900 Middle Channel



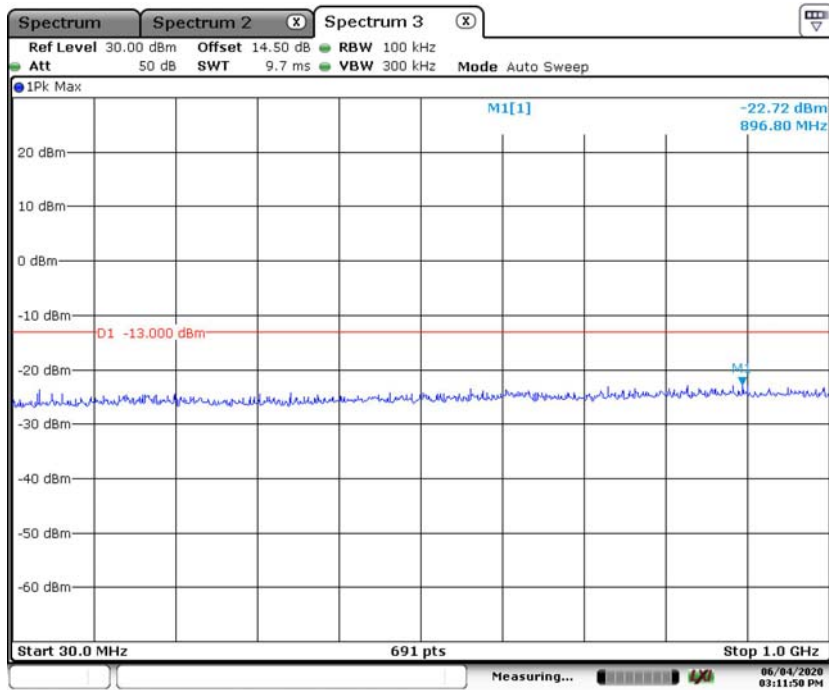
Date: 4.JUN.2020 10:38:20

Fundamental

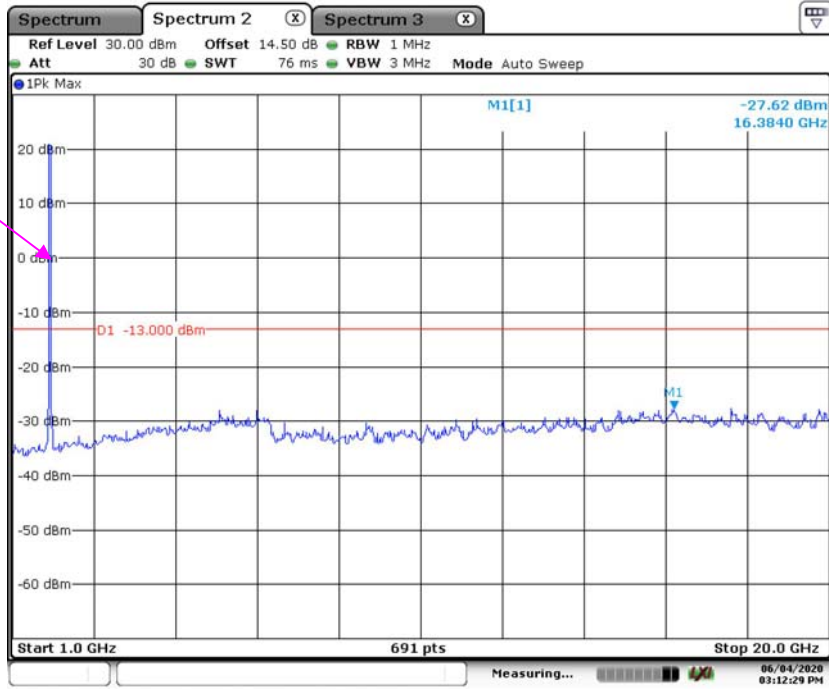


Date: 4.JUN.2020 10:39:22

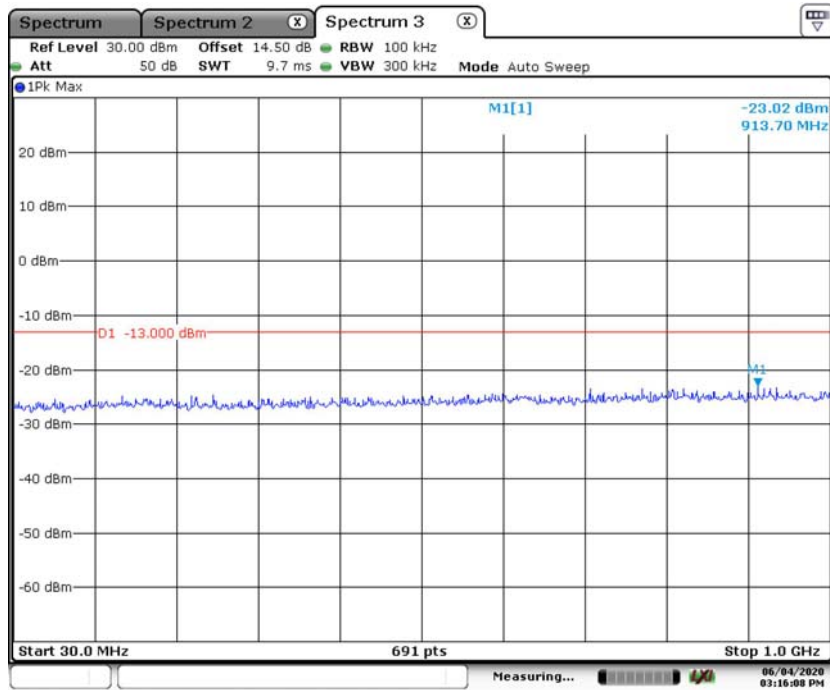
WCDMA Band 2 Rel 99 Middle Channel



Fundamental

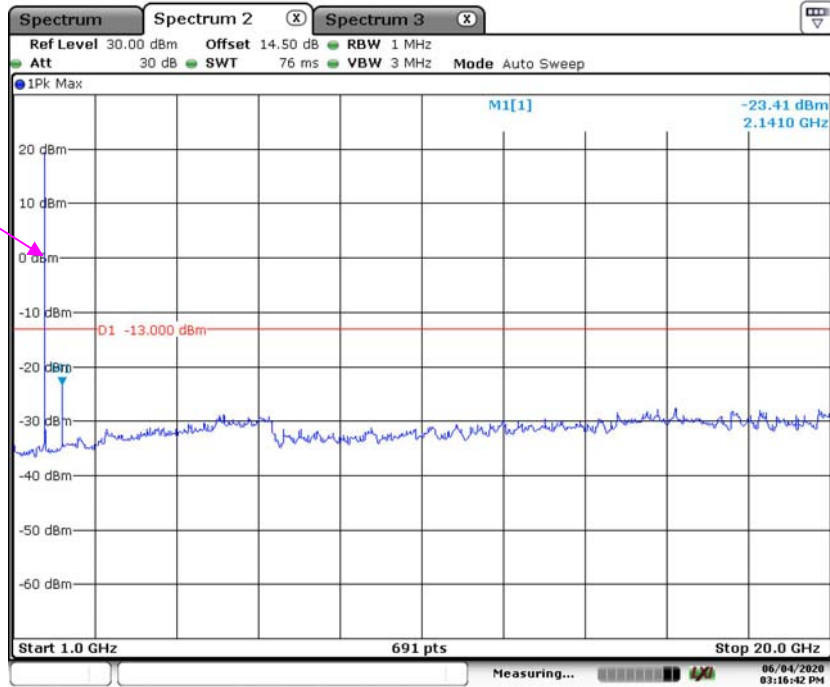
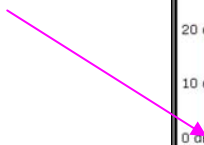


WCDMA Band 4 Rel 99 Middle Channel



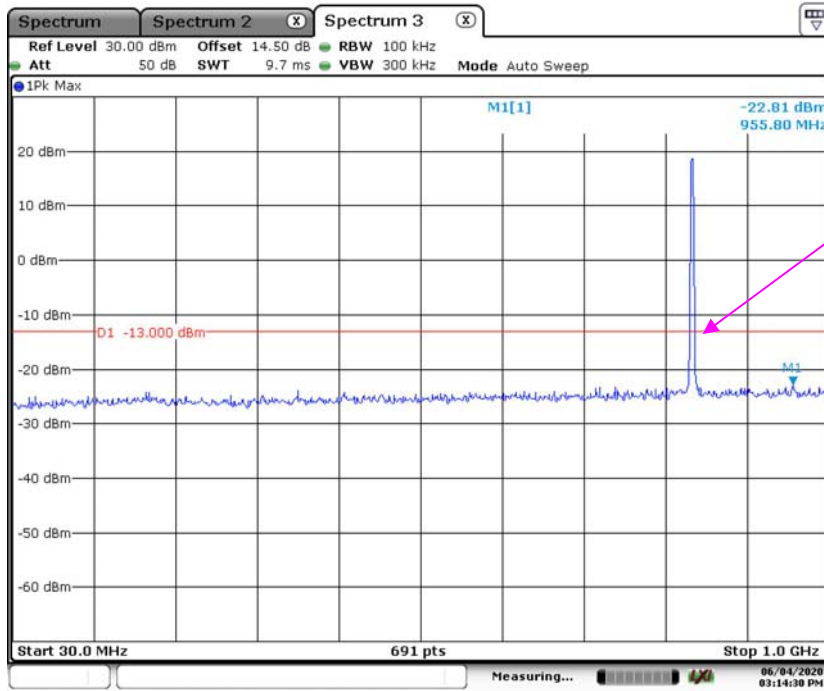
Date: 4.JUN.2020 15:16:07

Fundamental

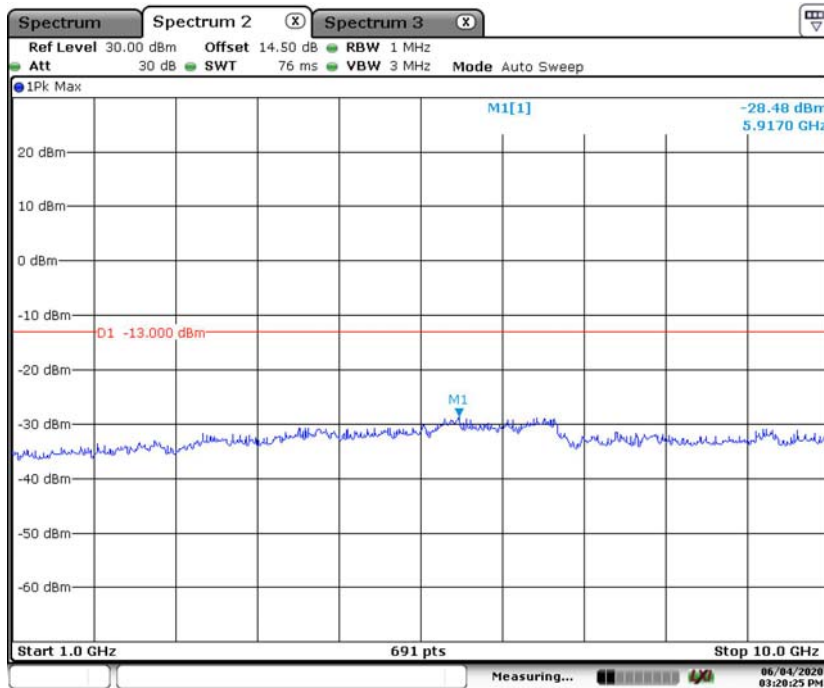


Date: 4.JUN.2020 15:16:42

WCDMA Band 5 Rel 99 Middle Channel



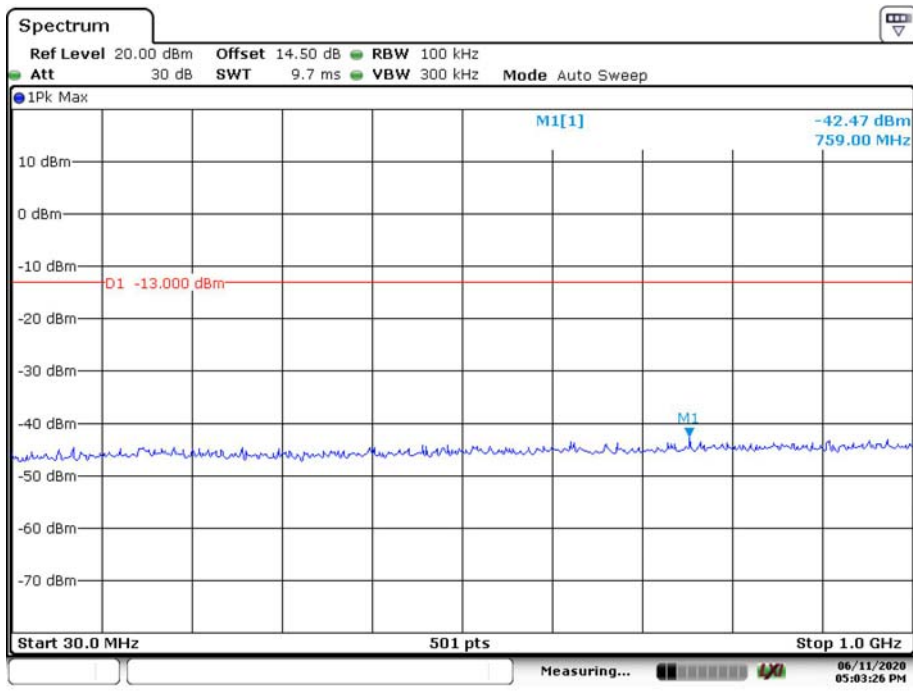
Fundamental



Date: 4.JUN.2020 15:20:24

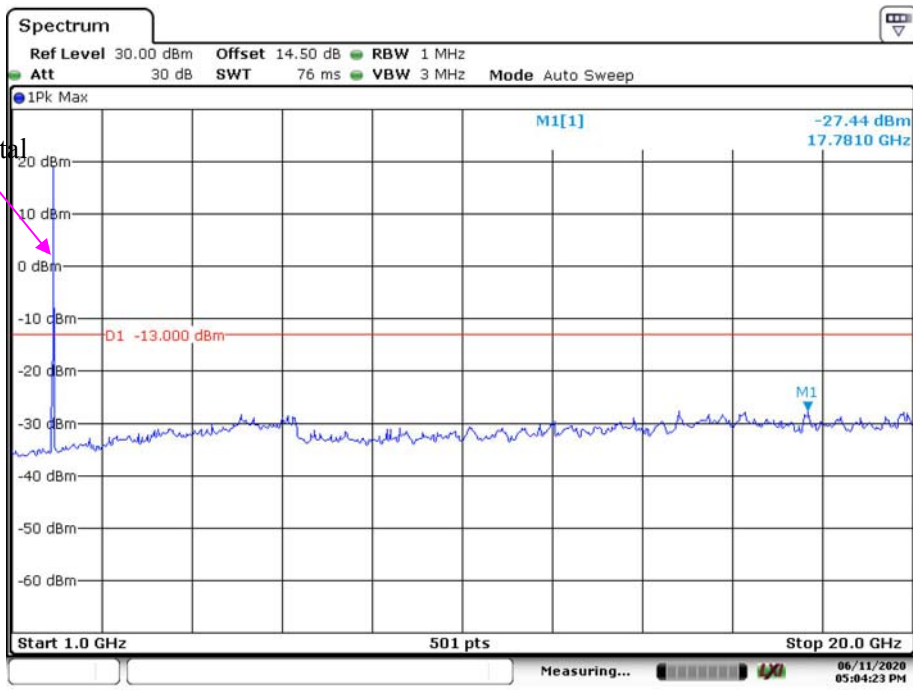
LTE Band 2:

1.4M QPSK Middle Channel



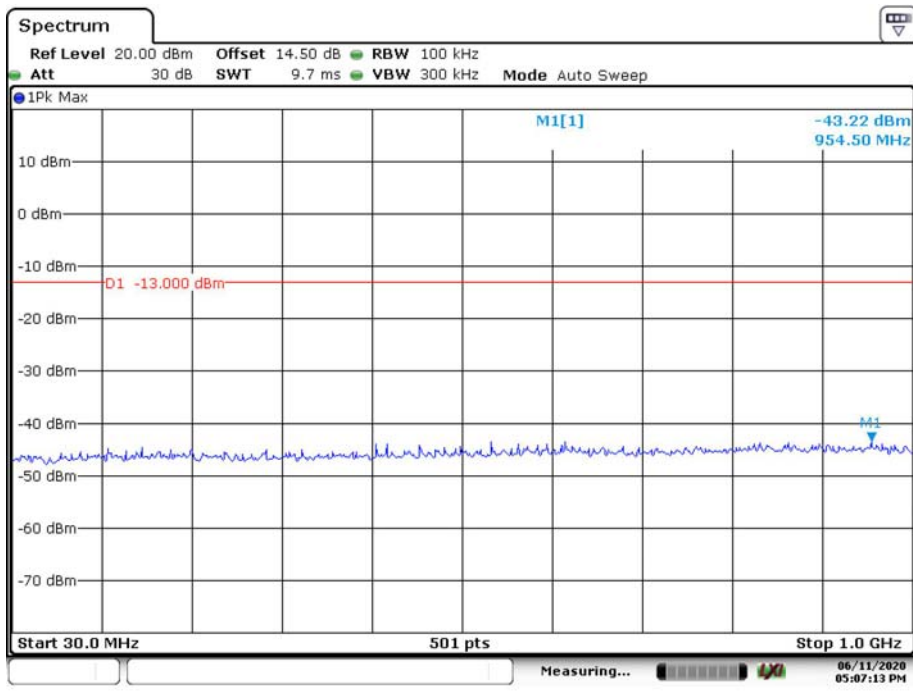
Date: 11.JUN.2020 17:03:26

Fundamental



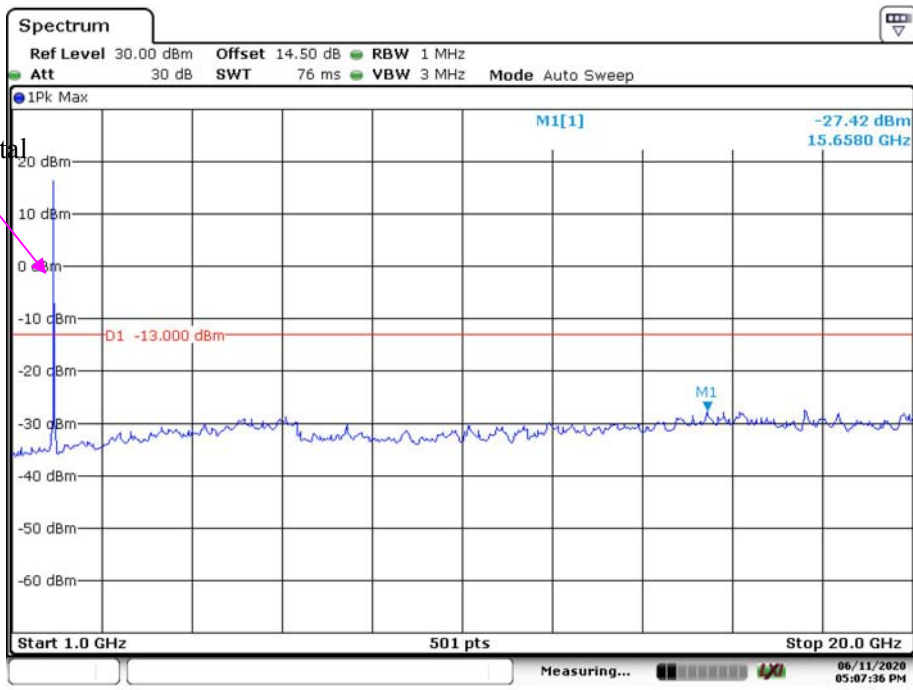
Date: 11.JUN.2020 17:04:23

3M QPSK Middle Channel



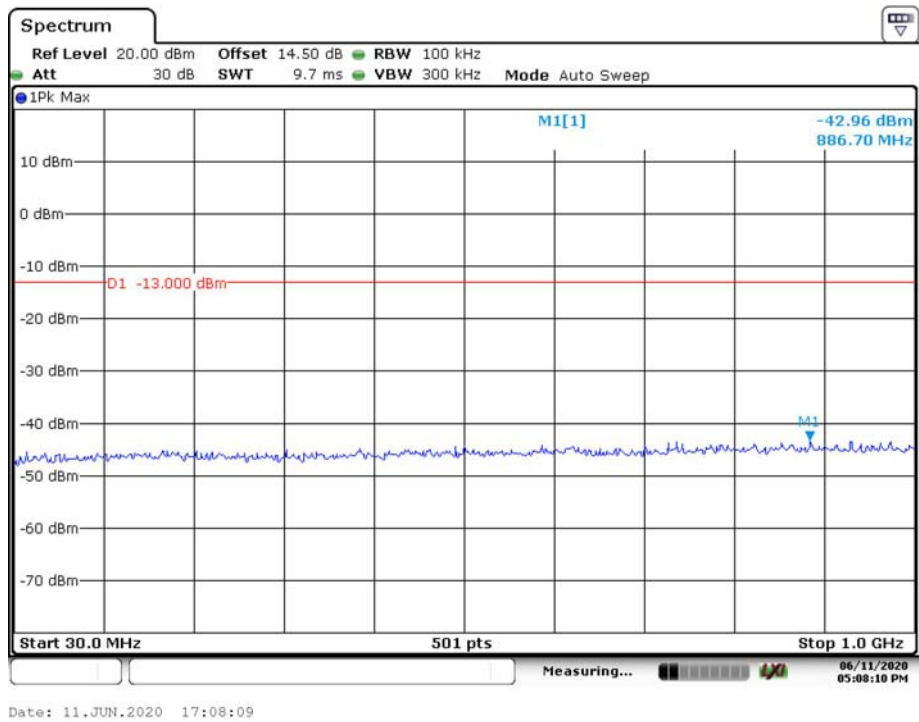
Date: 11.JUN.2020 17:07:13

Fundamental

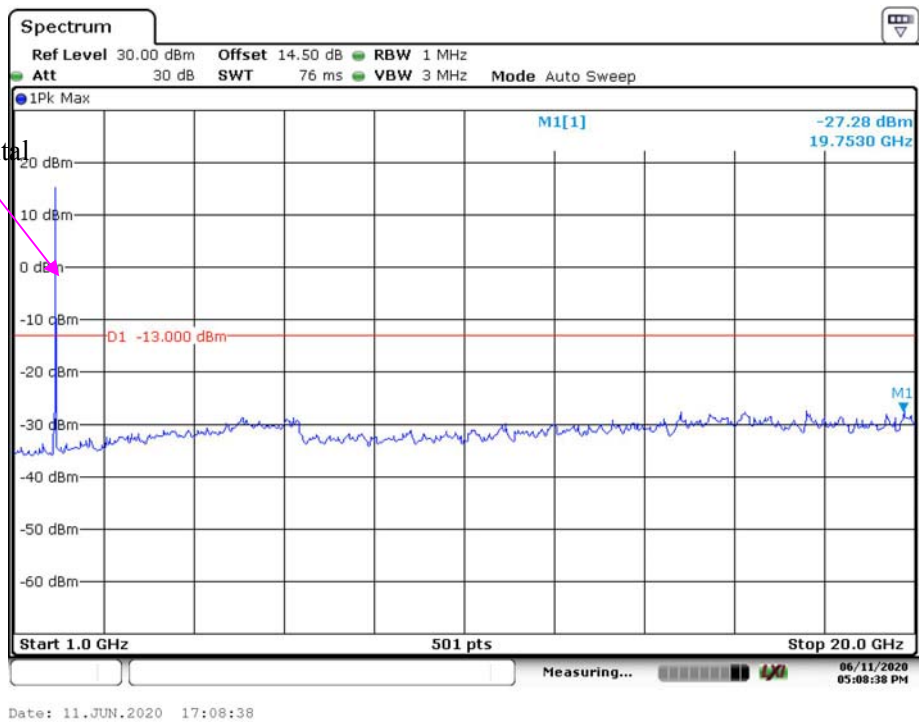


Date: 11.JUN.2020 17:07:36

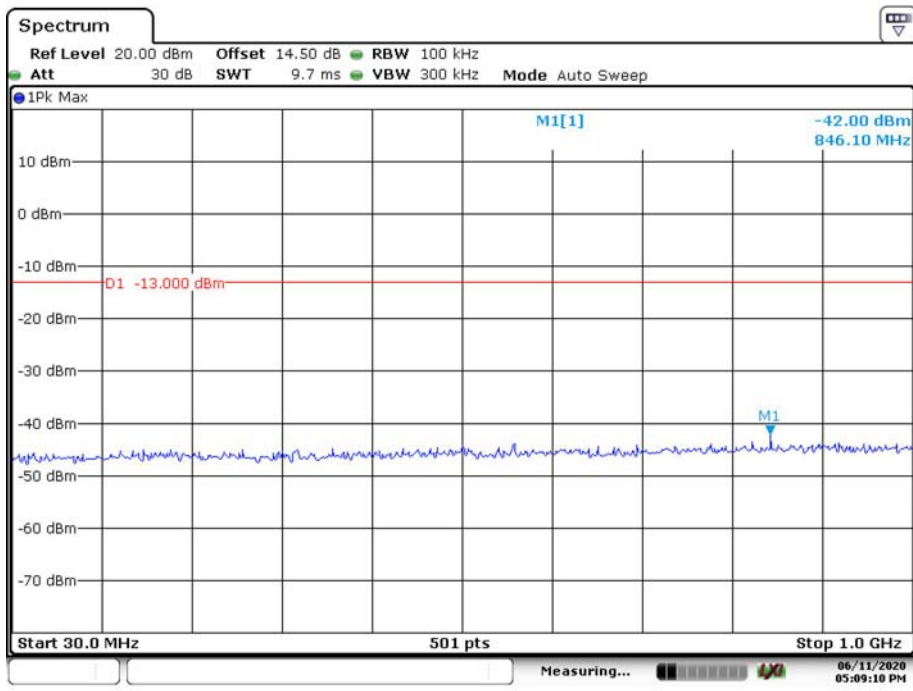
5M QPSK Middle Channel



Fundamental

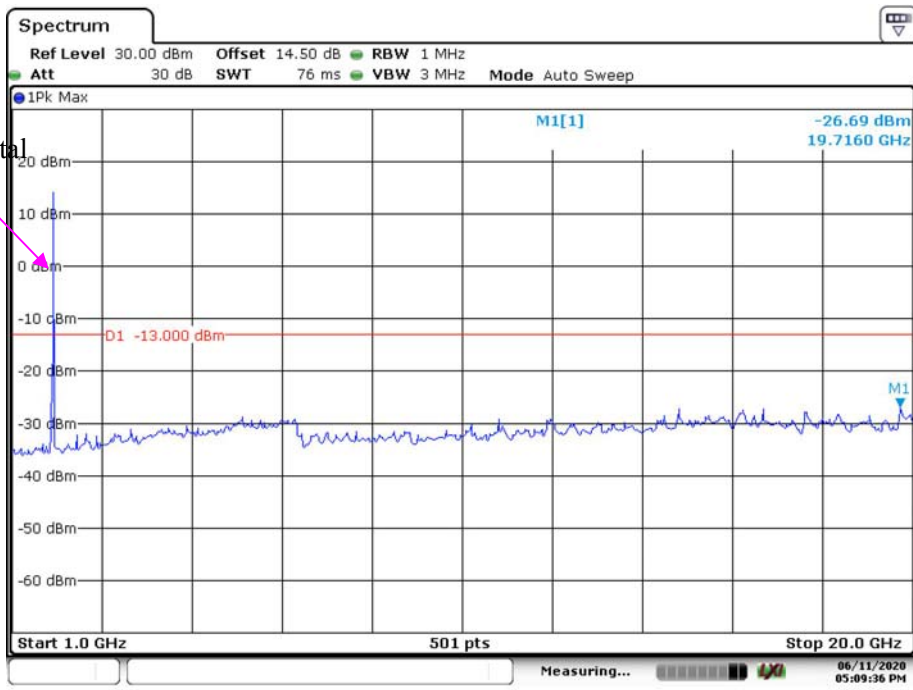


10M QPSK Middle Channel



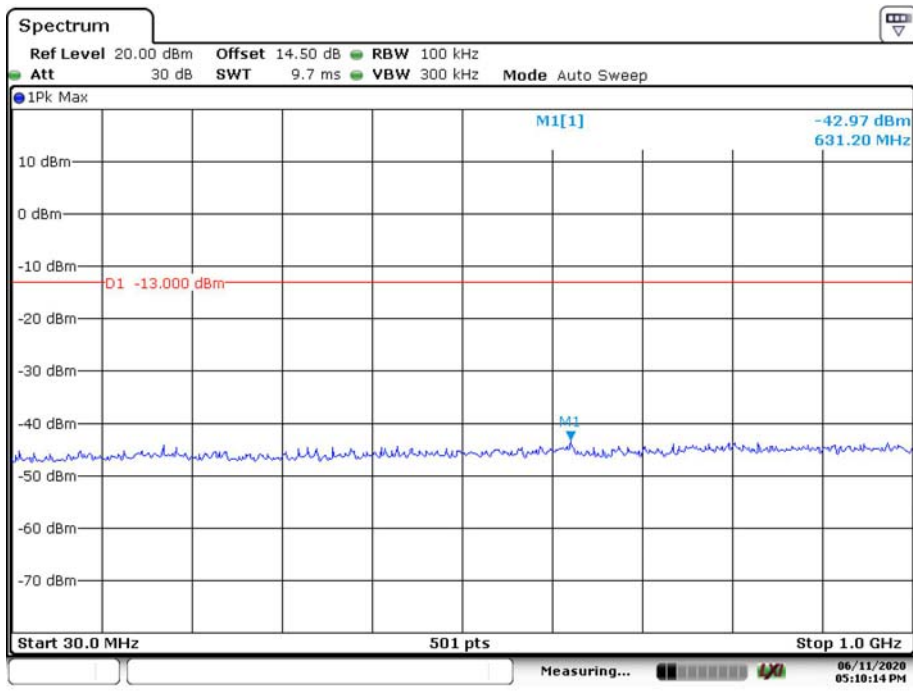
Date: 11.JUN.2020 17:09:10

Fundamental



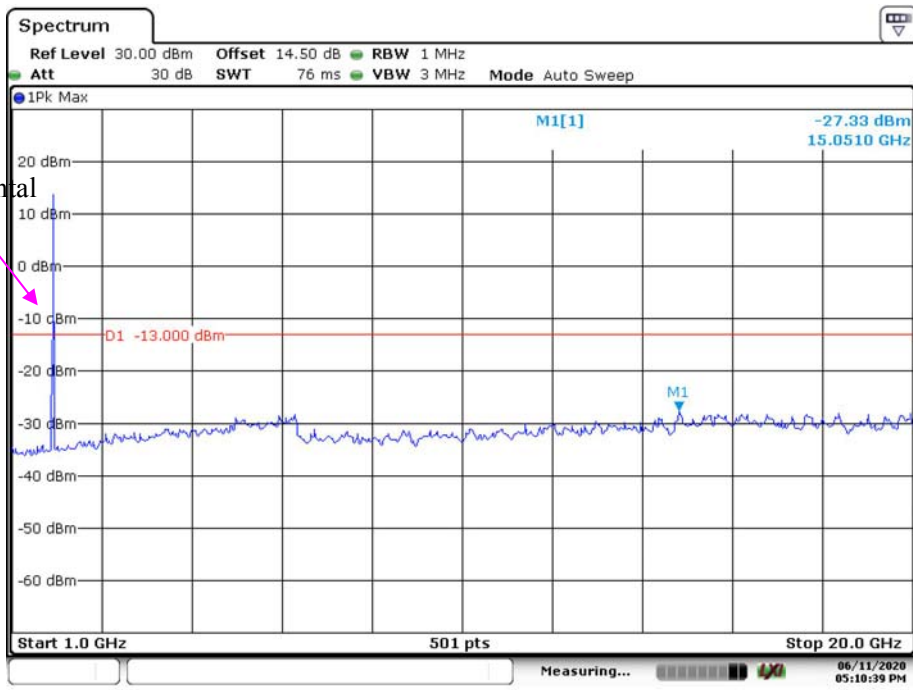
Date: 11.JUN.2020 17:09:36

15M QPSK Middle Channel



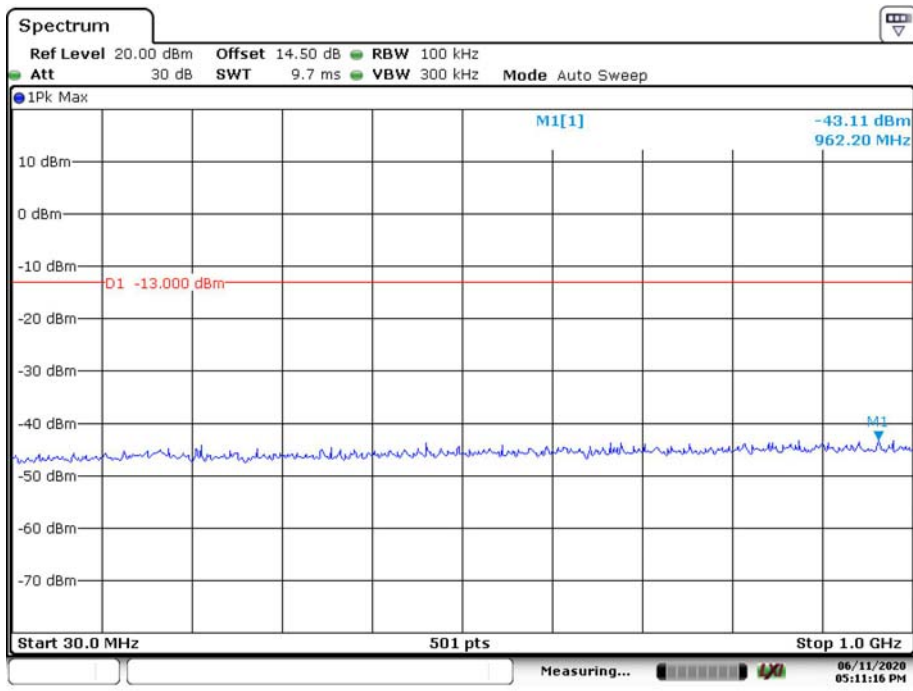
Date: 11.JUN.2020 17:10:14

Fundamental



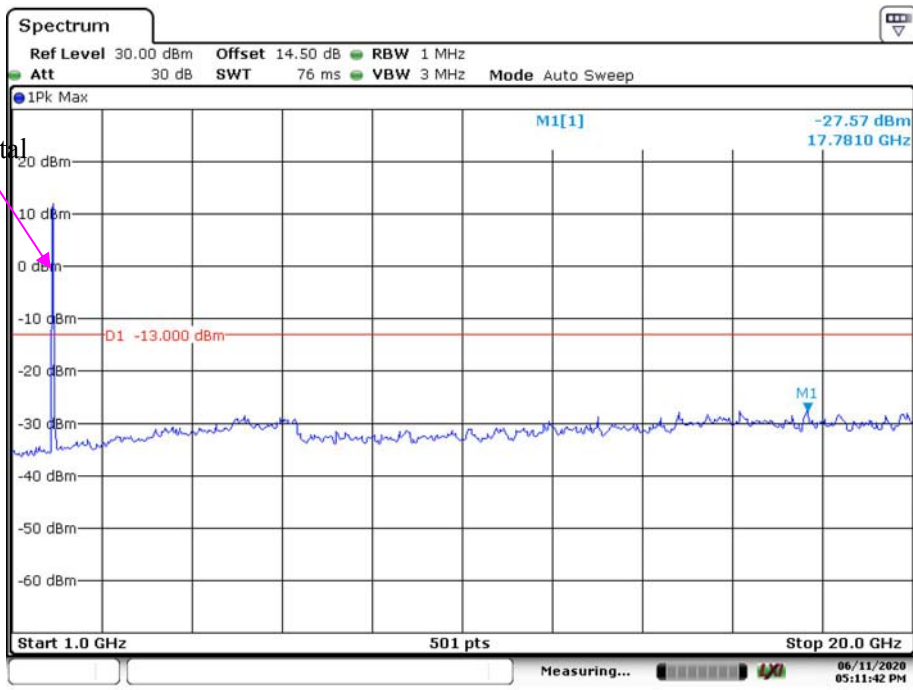
Date: 11.JUN.2020 17:10:39

20M QPSK Middle Channel



Date: 11.JUN.2020 17:11:16

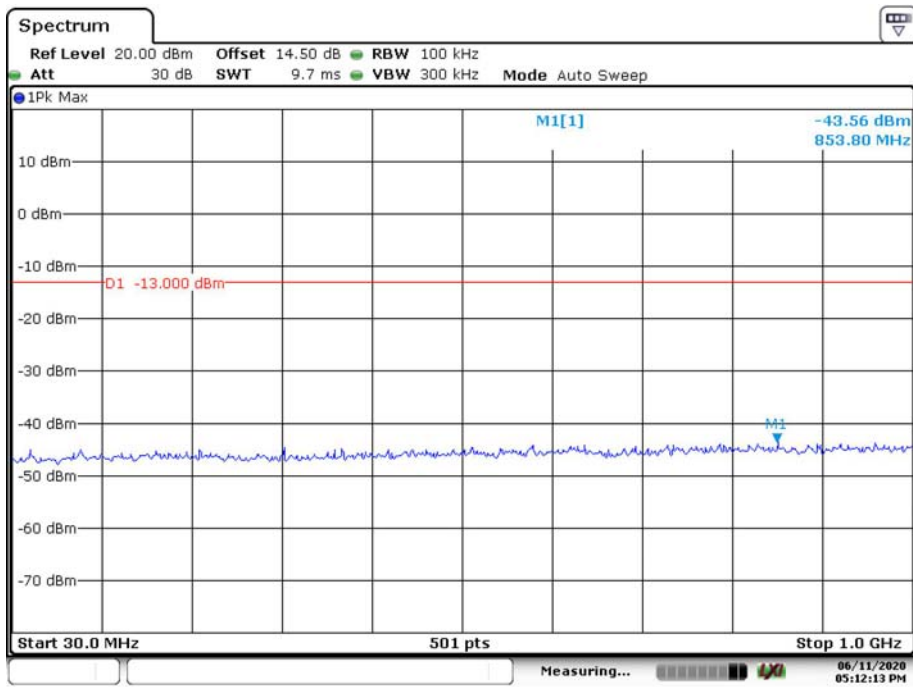
Fundamental



Date: 11.JUN.2020 17:11:42

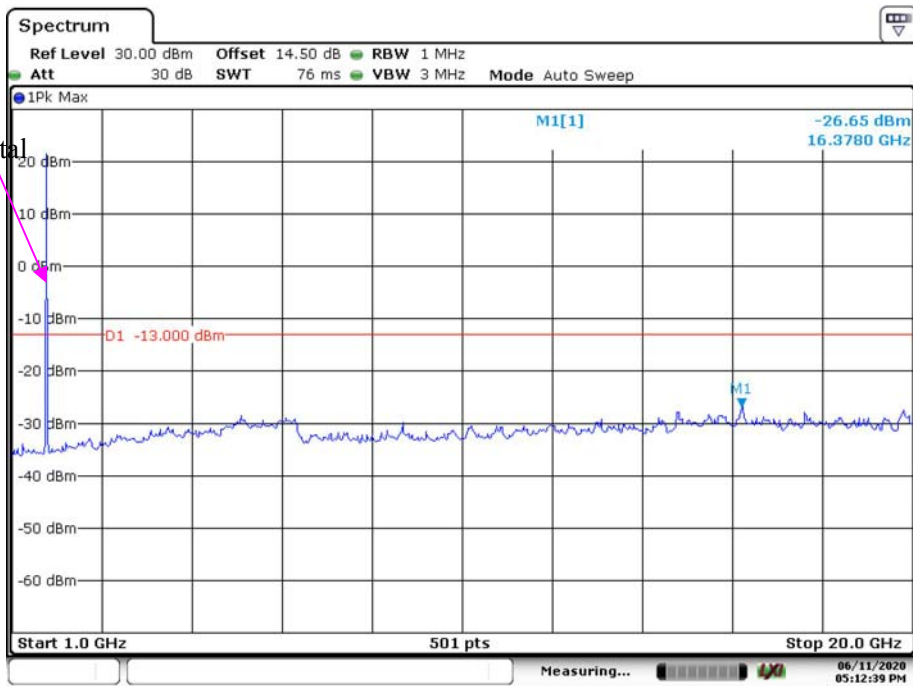
LTE Band 4:

1.4M QPSK Middle Channel



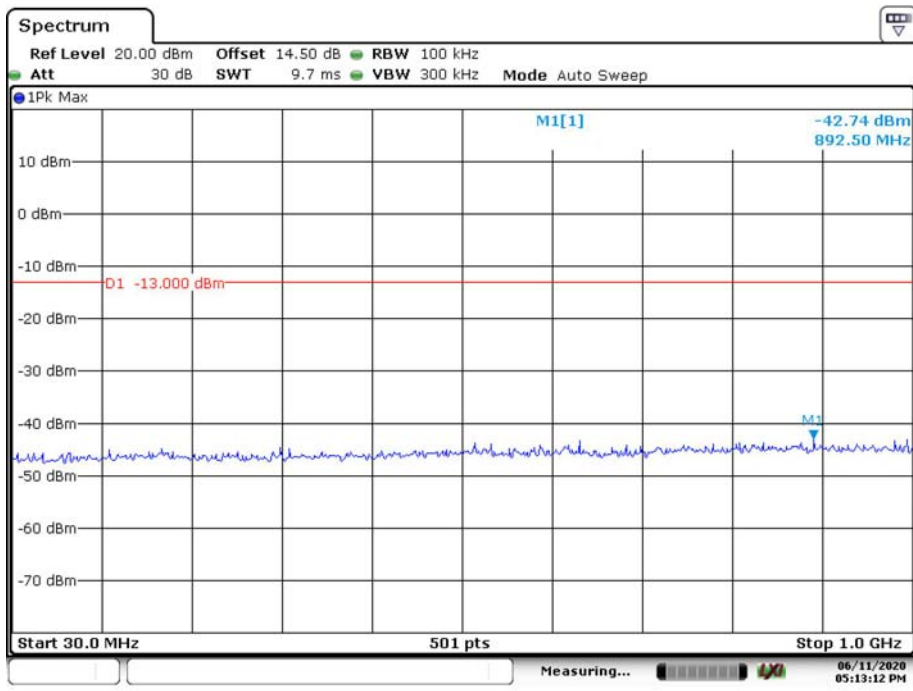
Date: 11.JUN.2020 17:12:13

Fundamental



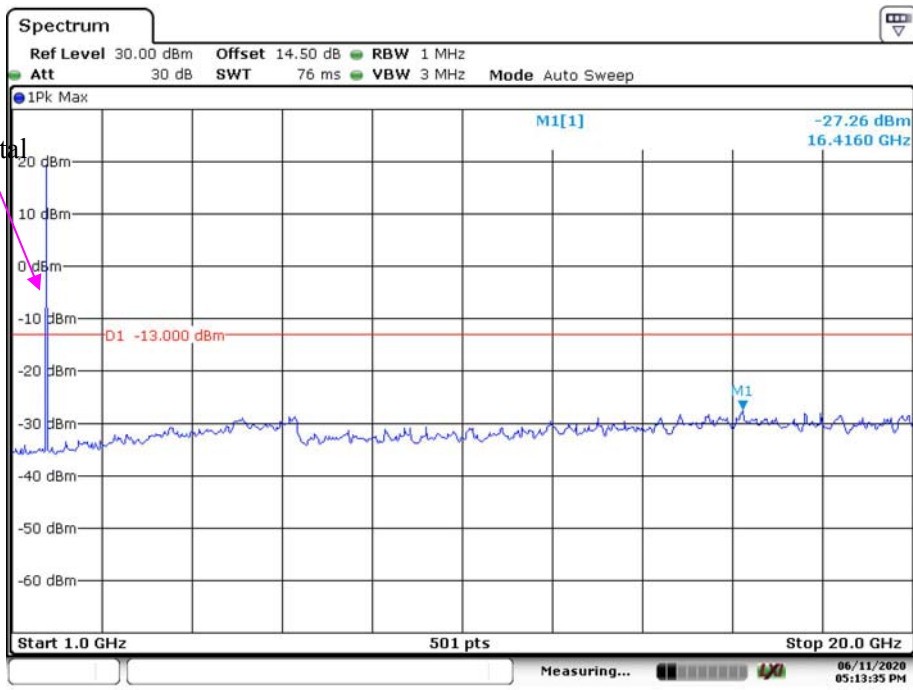
Date: 11.JUN.2020 17:12:39

3M QPSK Middle Channel



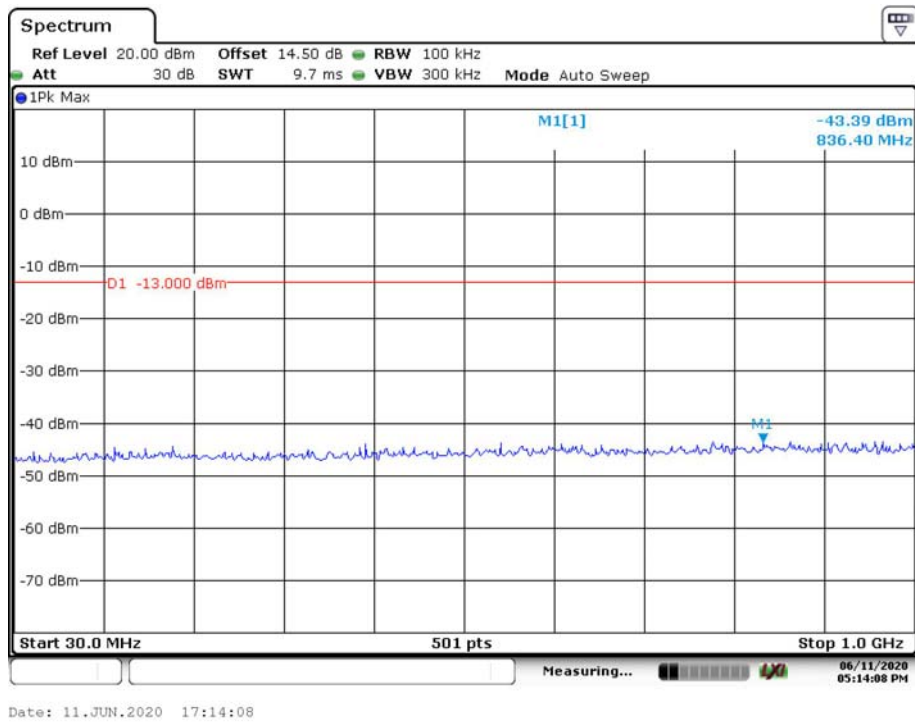
Date: 11.JUN.2020 17:13:12

Fundamental

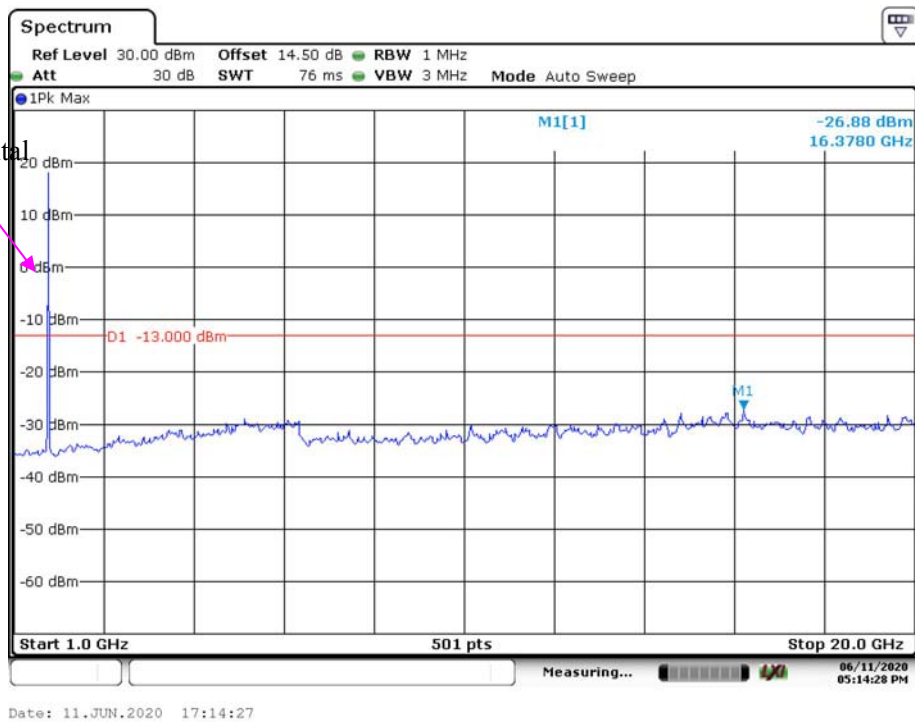


Date: 11.JUN.2020 17:13:35

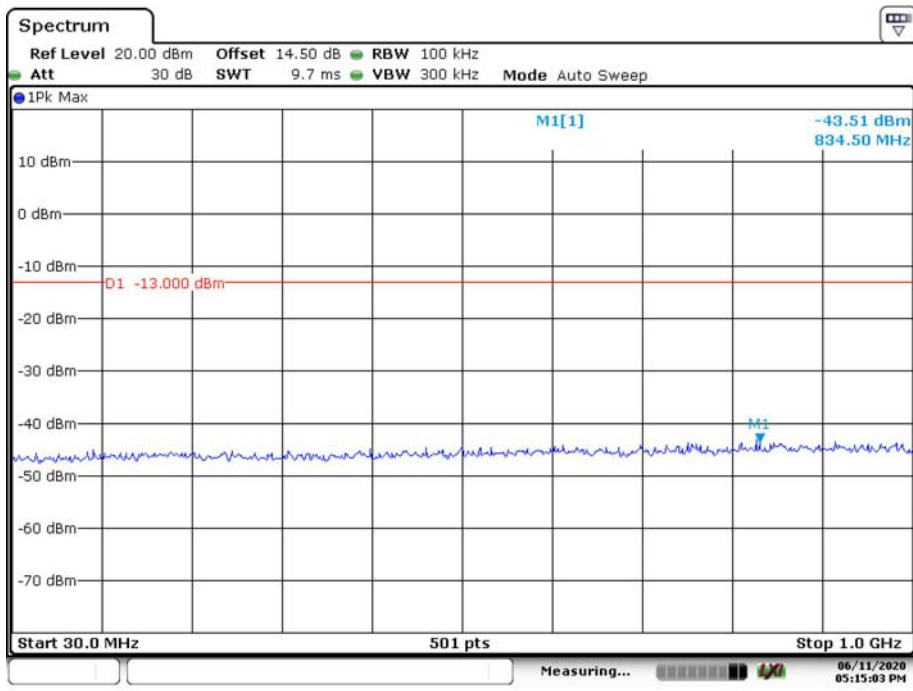
5M QPSK Middle Channel



Fundamental

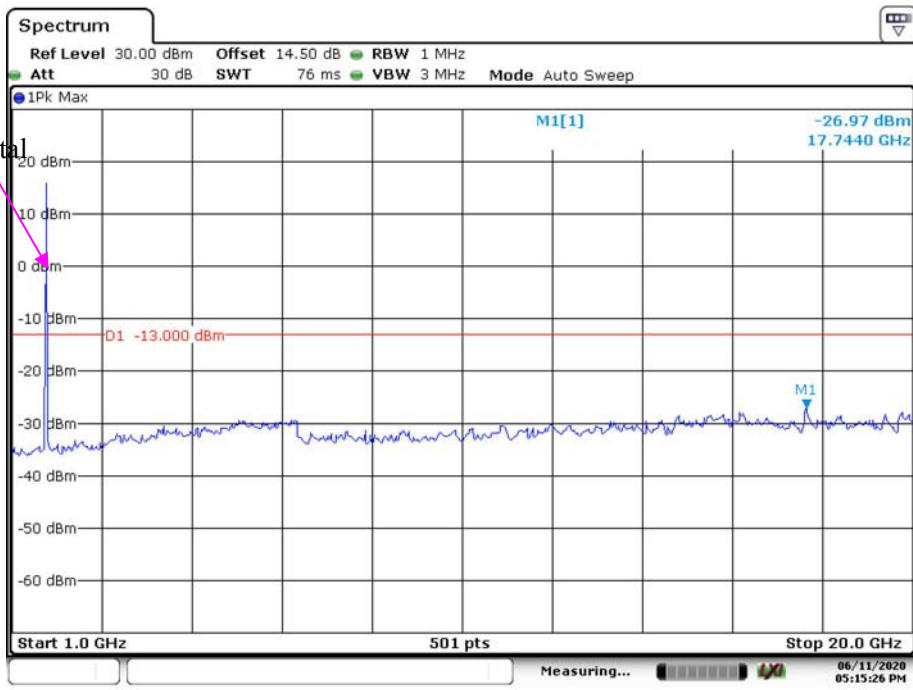


10M QPSK Middle Channel



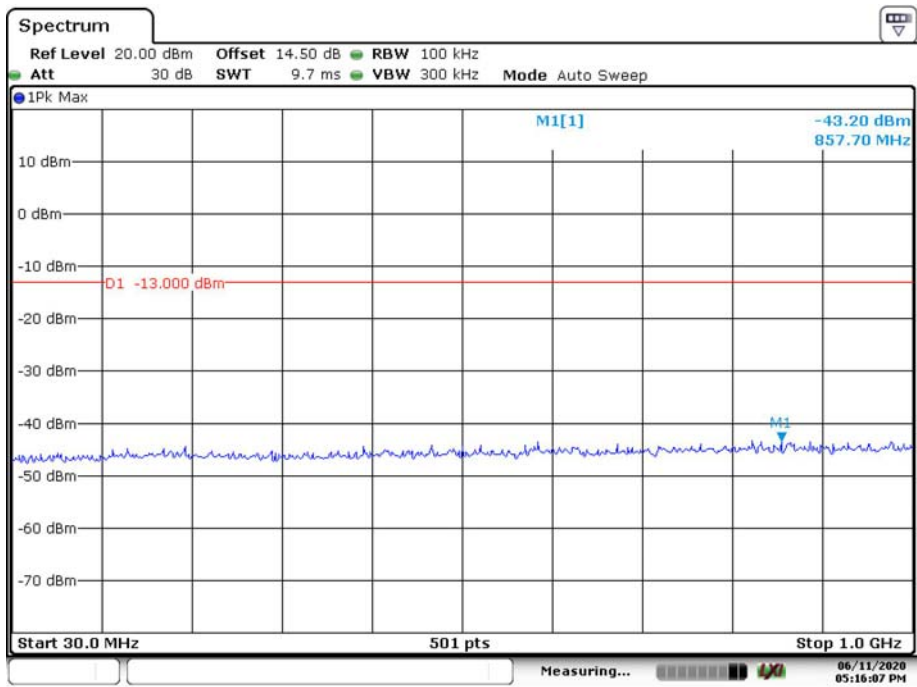
Date: 11.JUN.2020 17:15:03

Fundamental



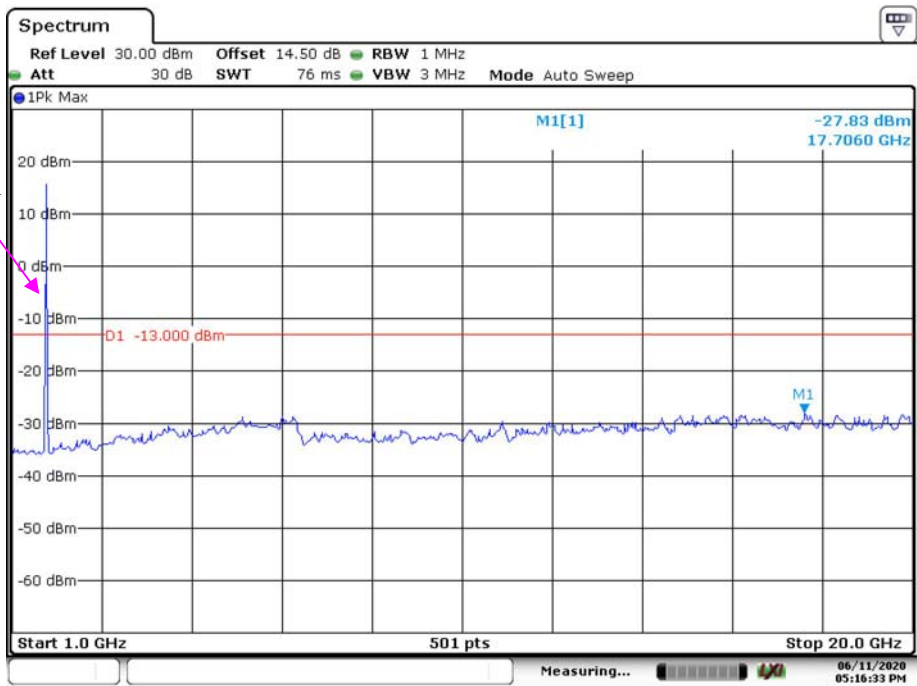
Date: 11.JUN.2020 17:15:26

15M QPSK Middle Channel



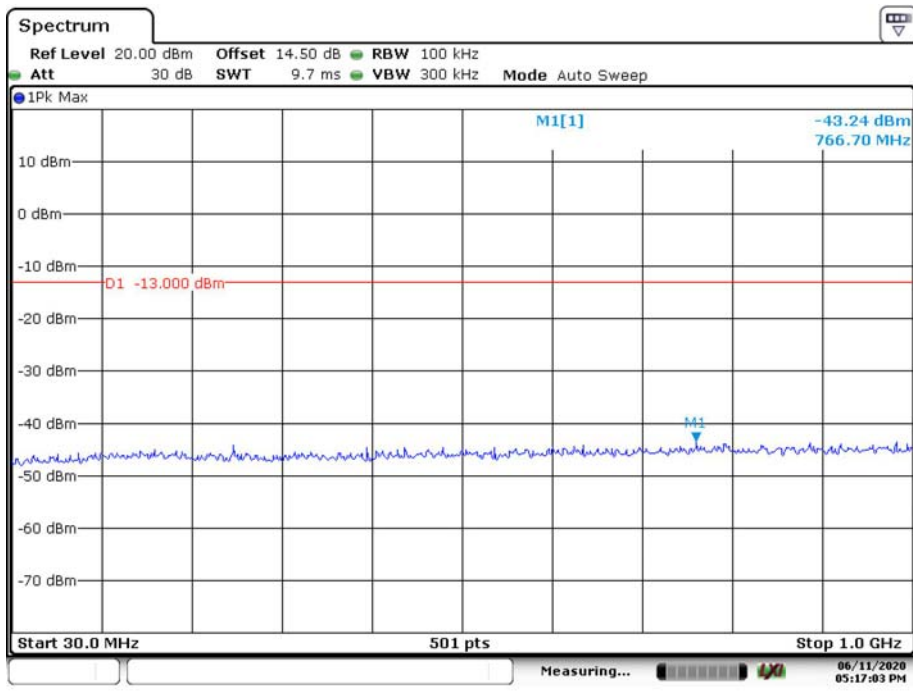
Date: 11.JUN.2020 17:16:07

Fundamental



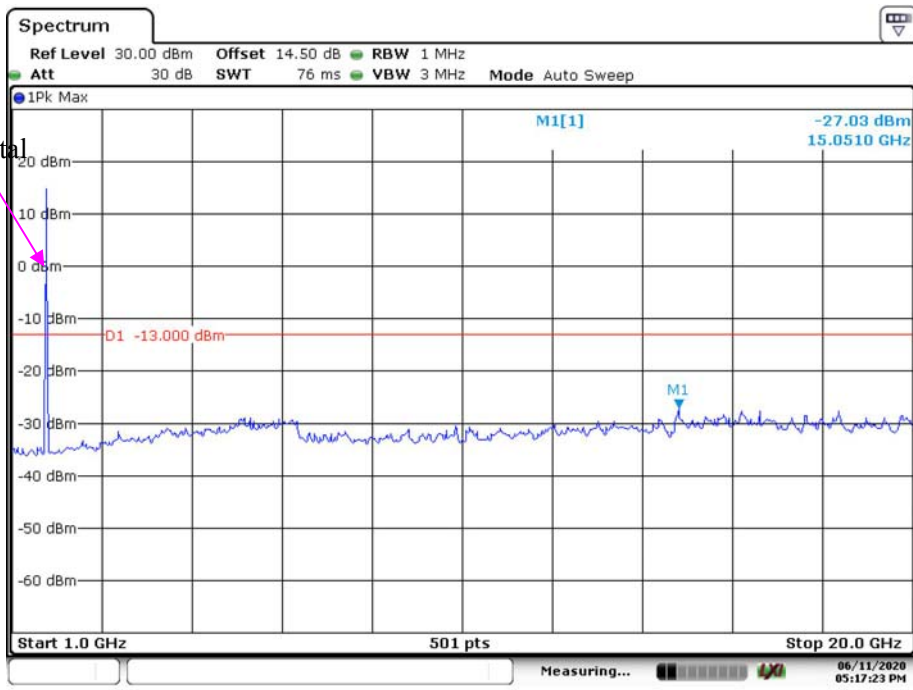
Date: 11.JUN.2020 17:16:33

20M QPSK Middle Channel



Date: 11.JUN.2020 17:17:03

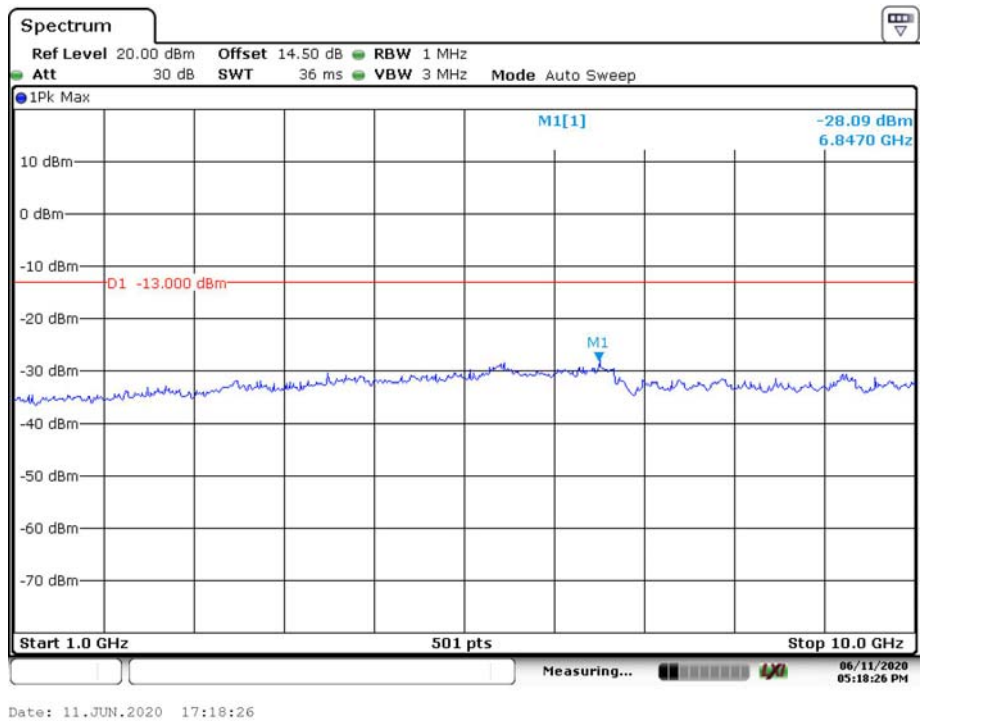
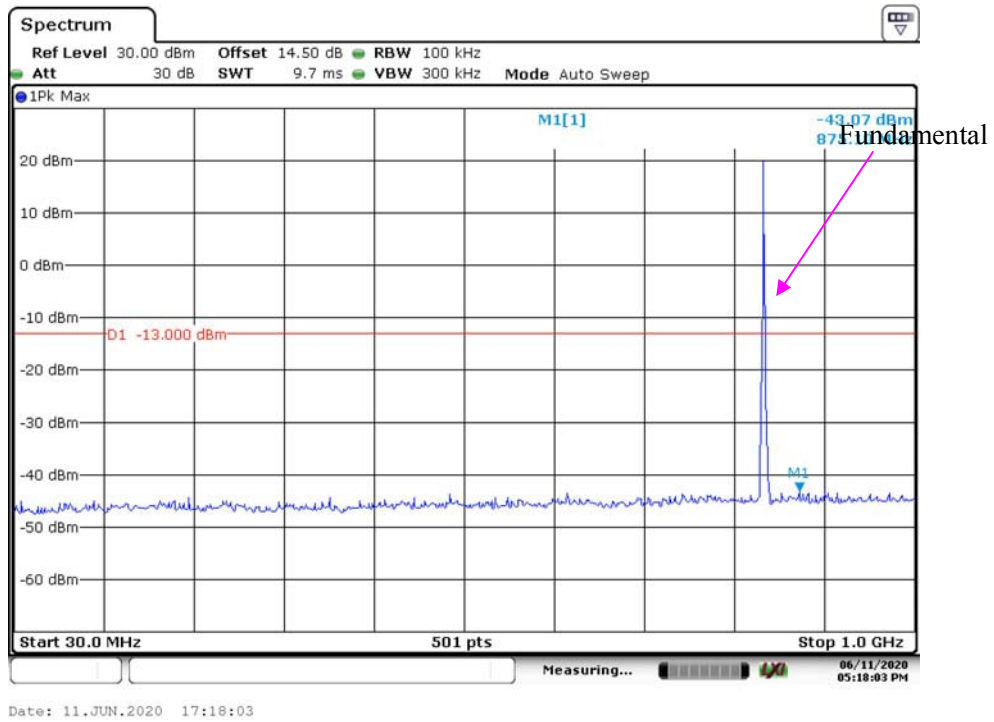
Fundamental



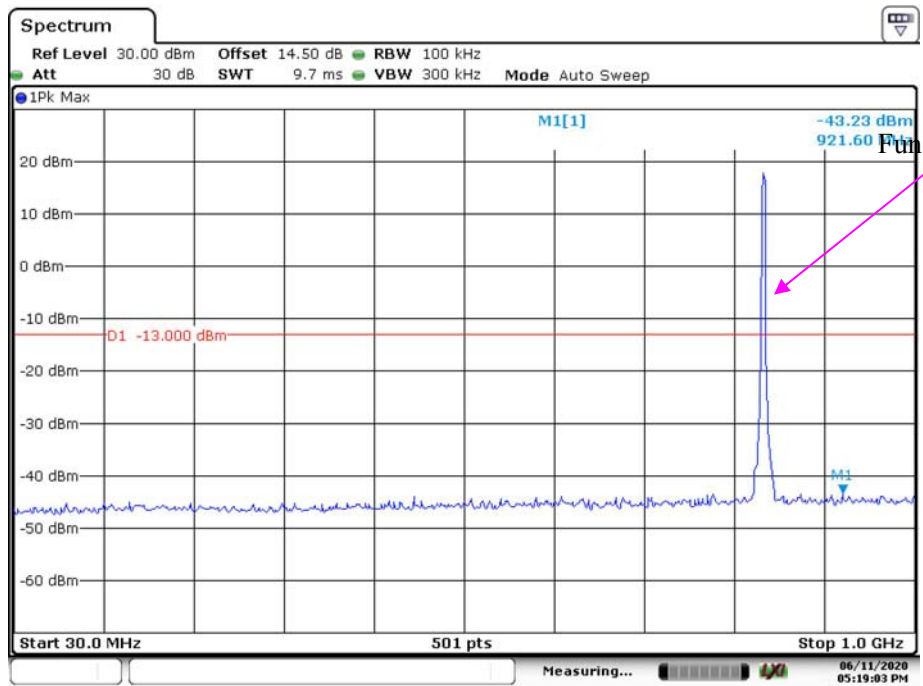
Date: 11.JUN.2020 17:17:23

LTE Band 5 (Middle Channel)

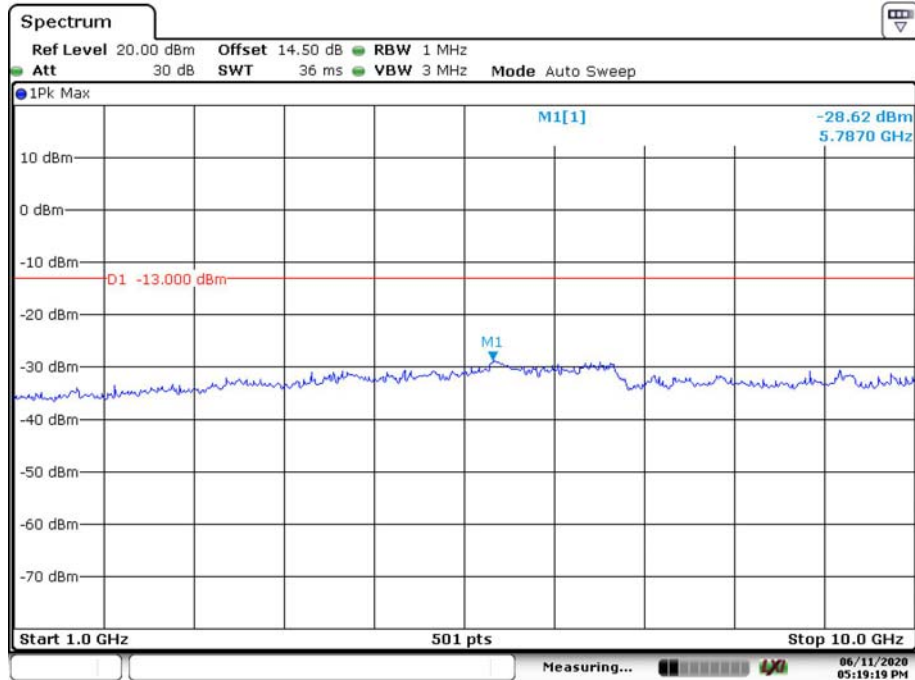
QPSK_1.4 MHz



QPSK_3 MHz

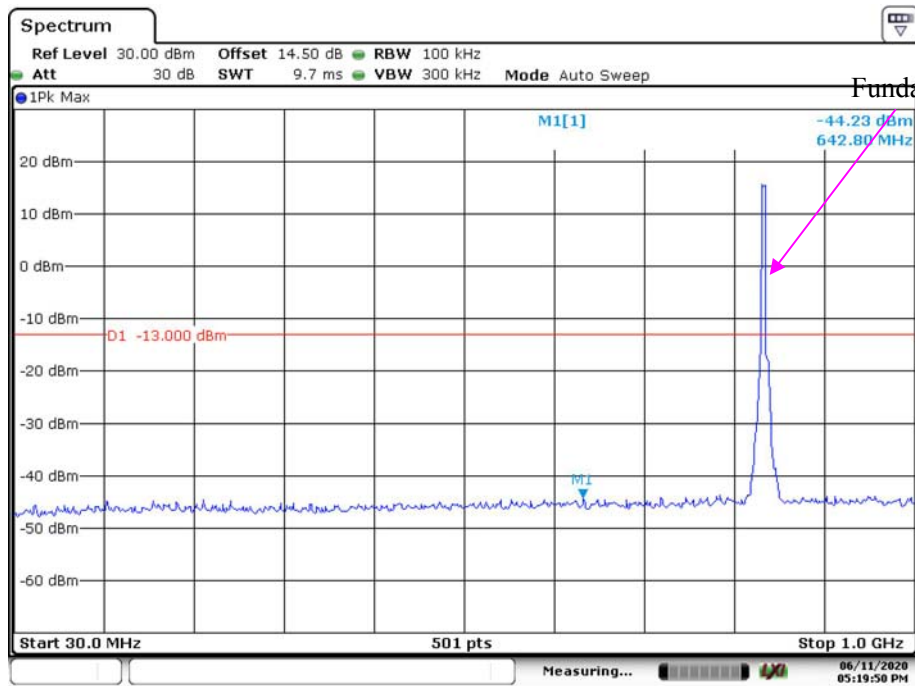


Date: 11.JUN.2020 17:19:03



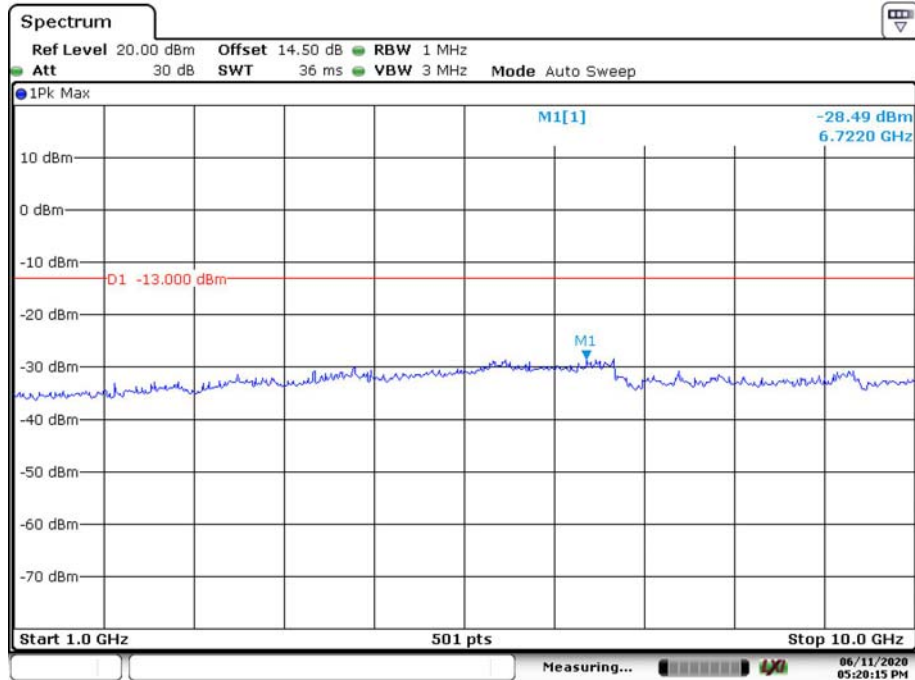
Date: 11.JUN.2020 17:19:19

QPSK_5 MHz



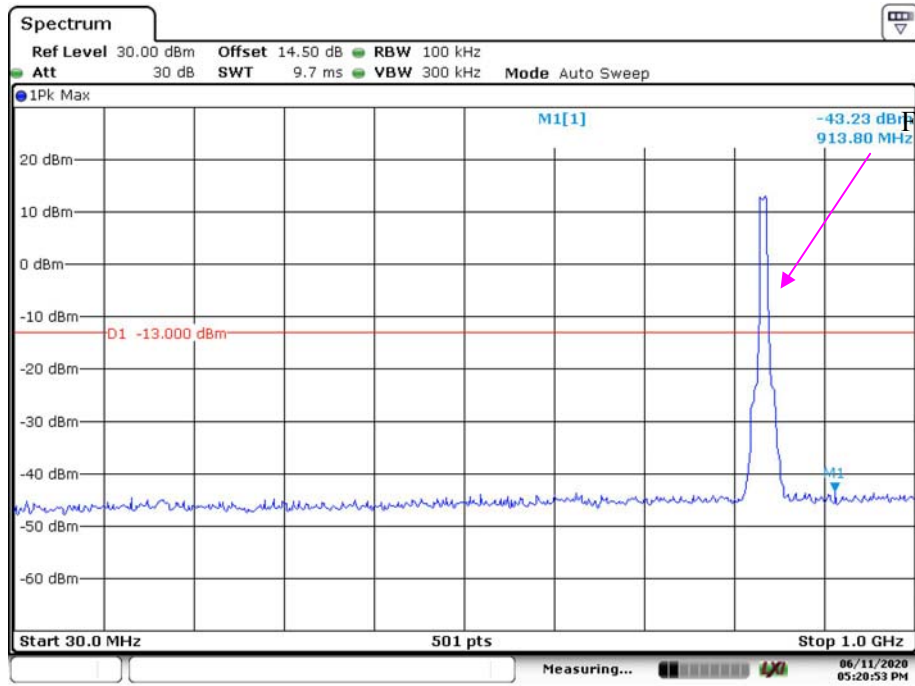
Fundamental

Date: 11.JUN.2020 17:19:50



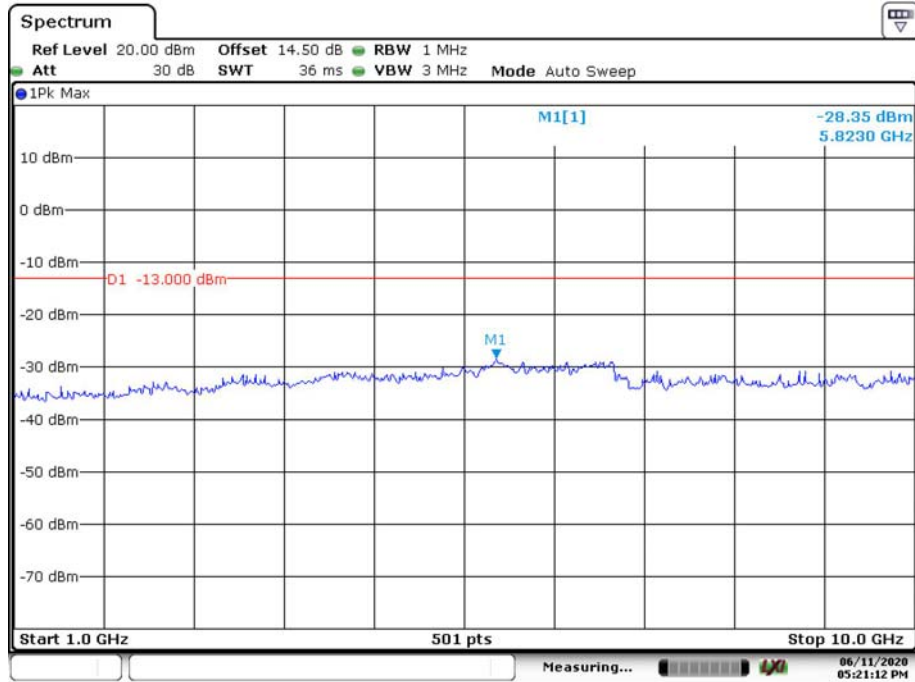
Date: 11.JUN.2020 17:20:15

QPSK_10 MHz



Fundamental

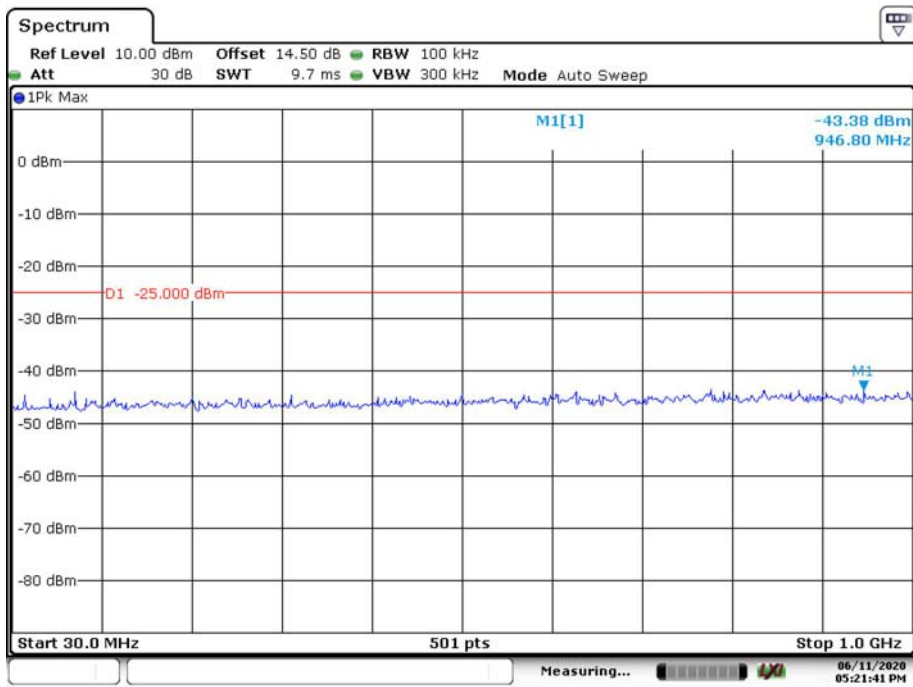
Date: 11.JUN.2020 17:20:53



Date: 11.JUN.2020 17:21:12

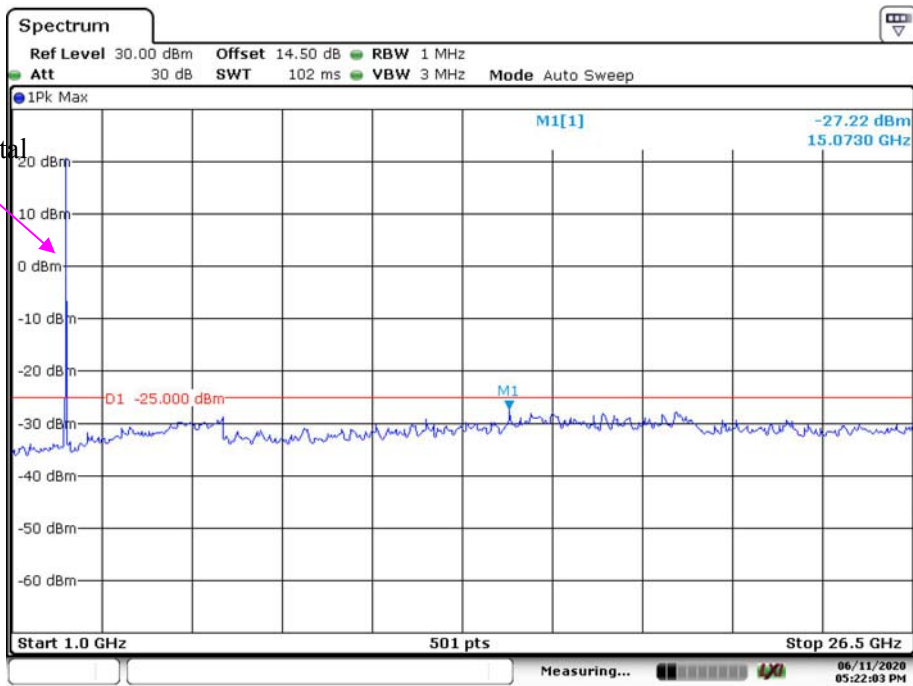
LTE Band 7:

5M QPSK Middle Channel



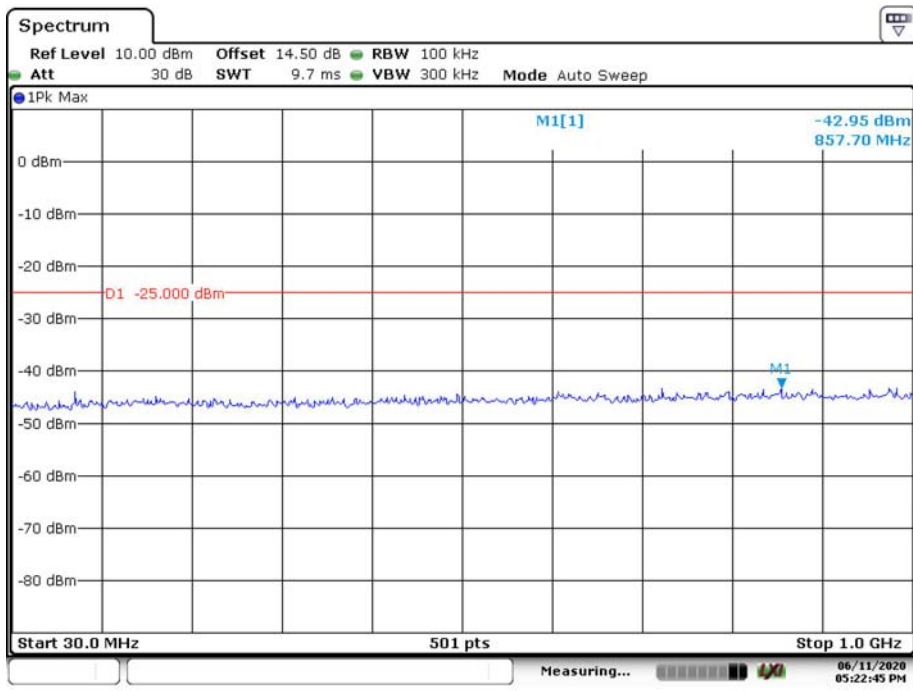
Date: 11.JUN.2020 17:21:41

Fundamental



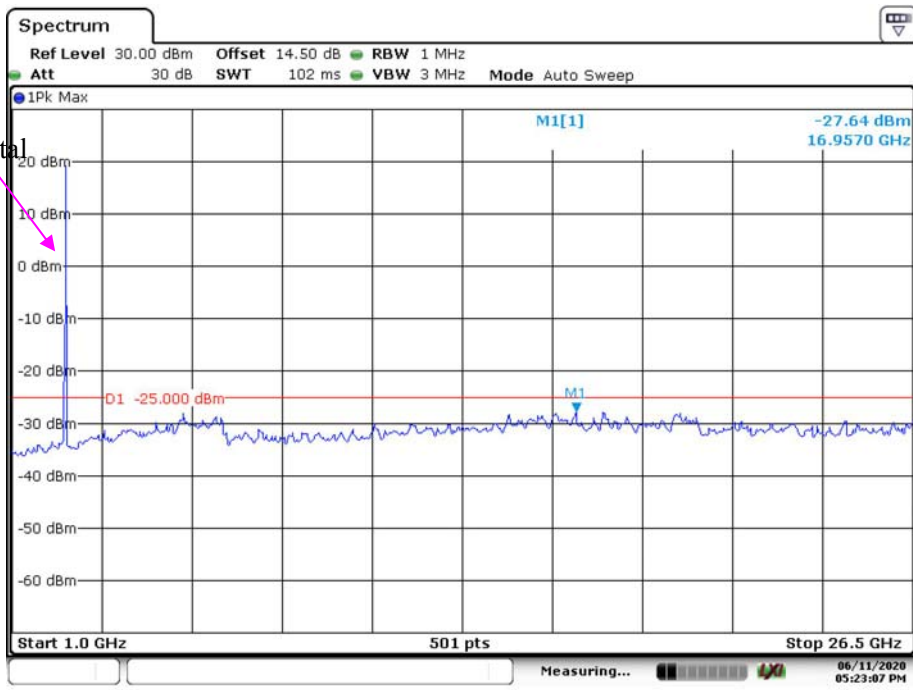
Date: 11.JUN.2020 17:22:03

10M QPSK Middle Channel



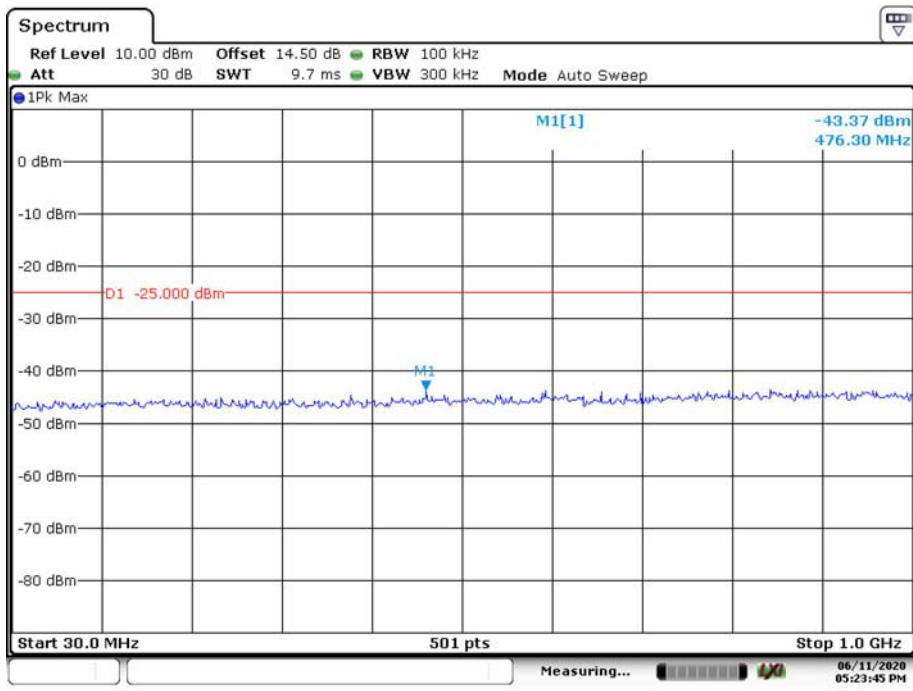
Date: 11.JUN.2020 17:22:45

Fundamental



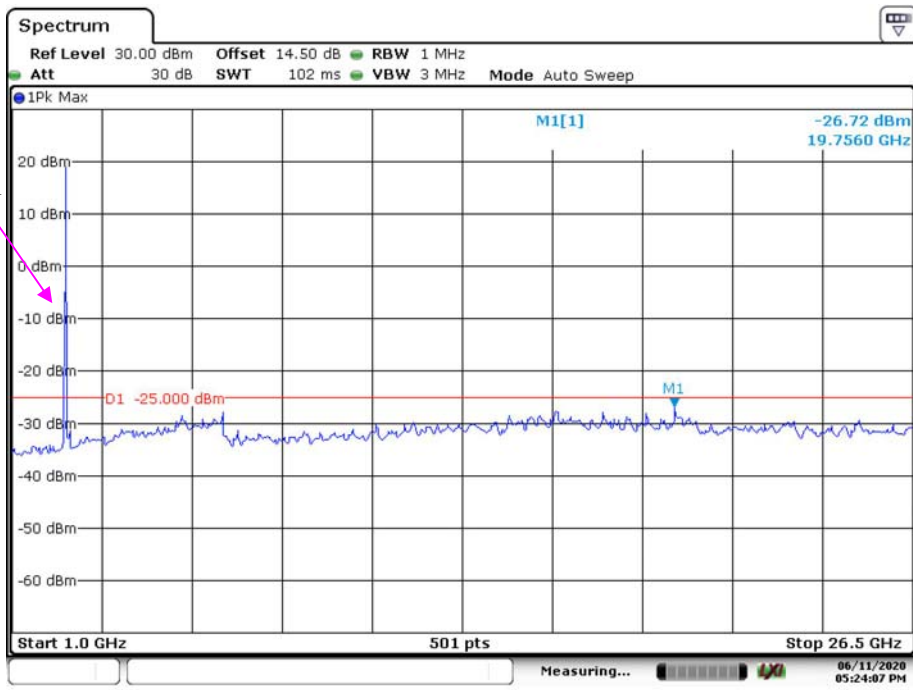
Date: 11.JUN.2020 17:23:07

15M QPSK Middle Channel



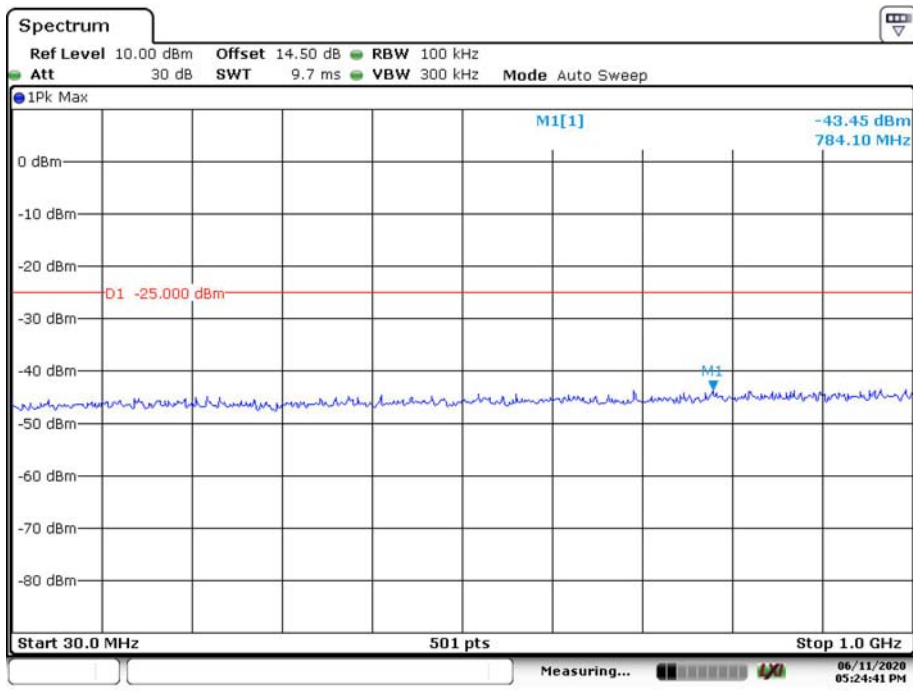
Date: 11.JUN.2020 17:23:45

Fundamental



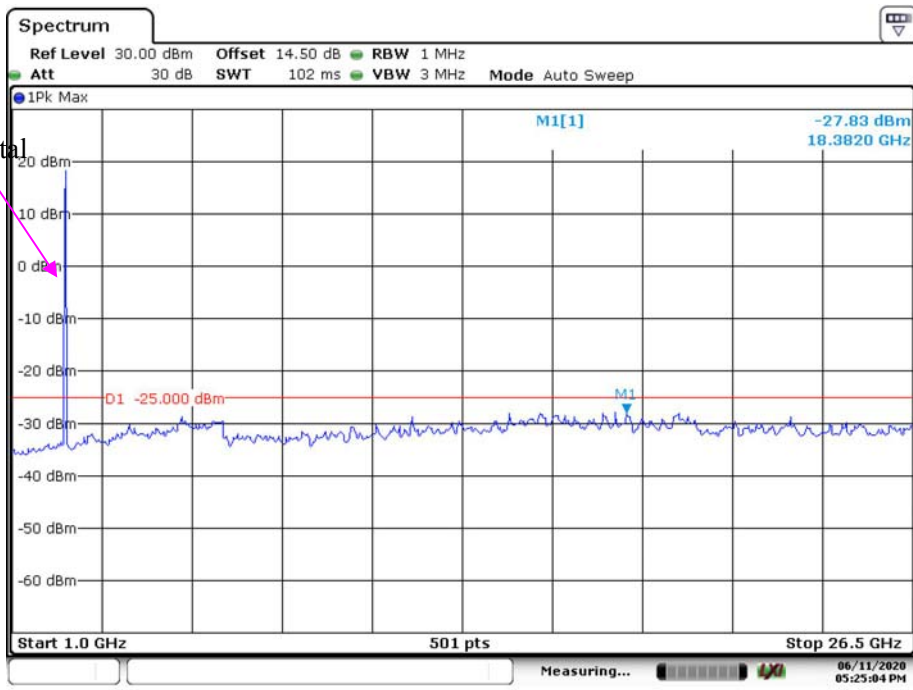
Date: 11.JUN.2020 17:24:07

20M QPSK Middle Channel



Date: 11.JUN.2020 17:24:41

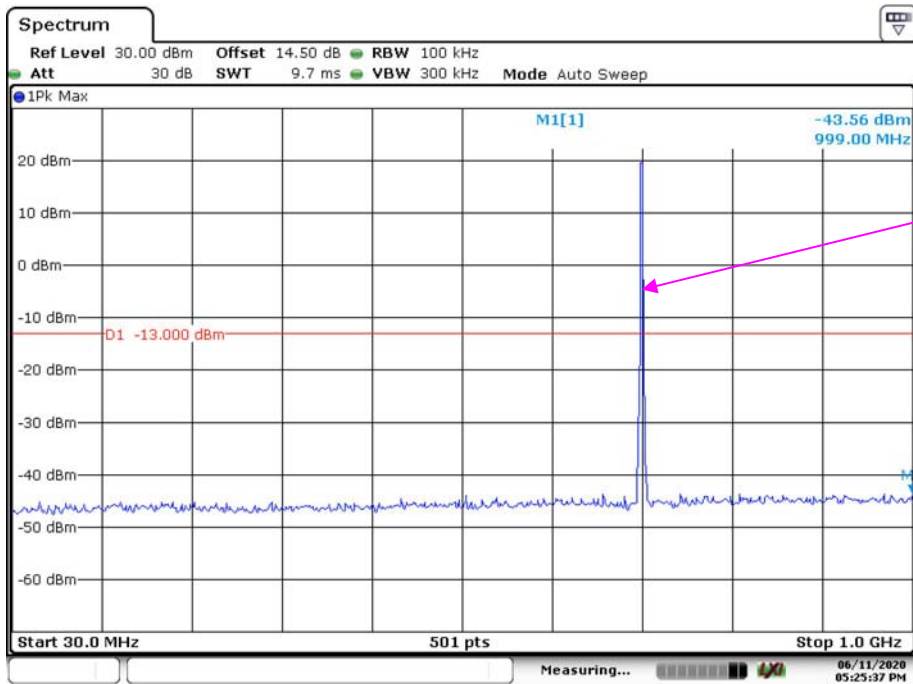
Fundamental



Date: 11.JUN.2020 17:25:04

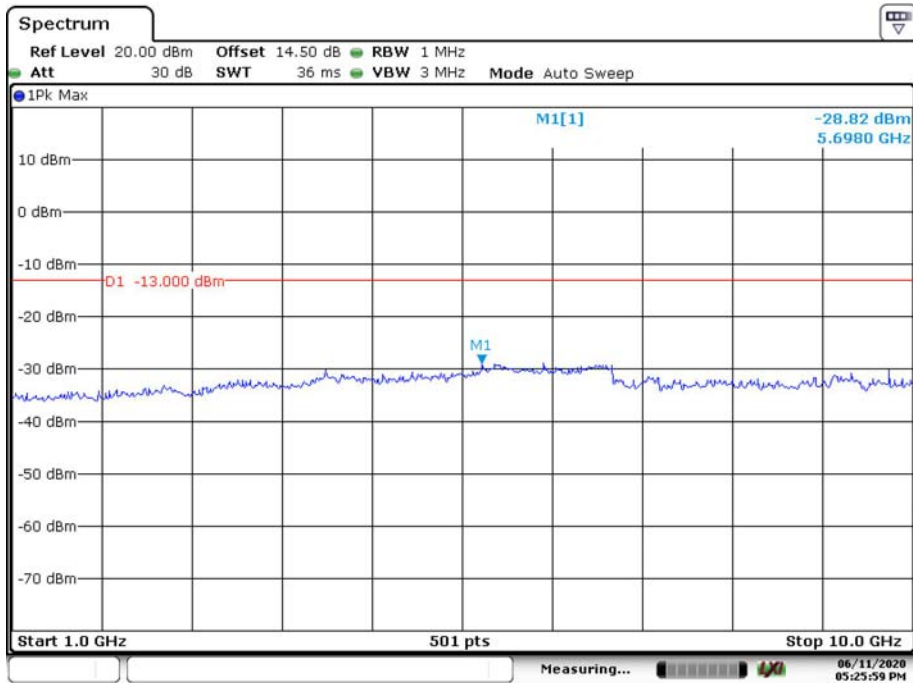
LTE Band 12:

1.4M QPSK Middle Channel



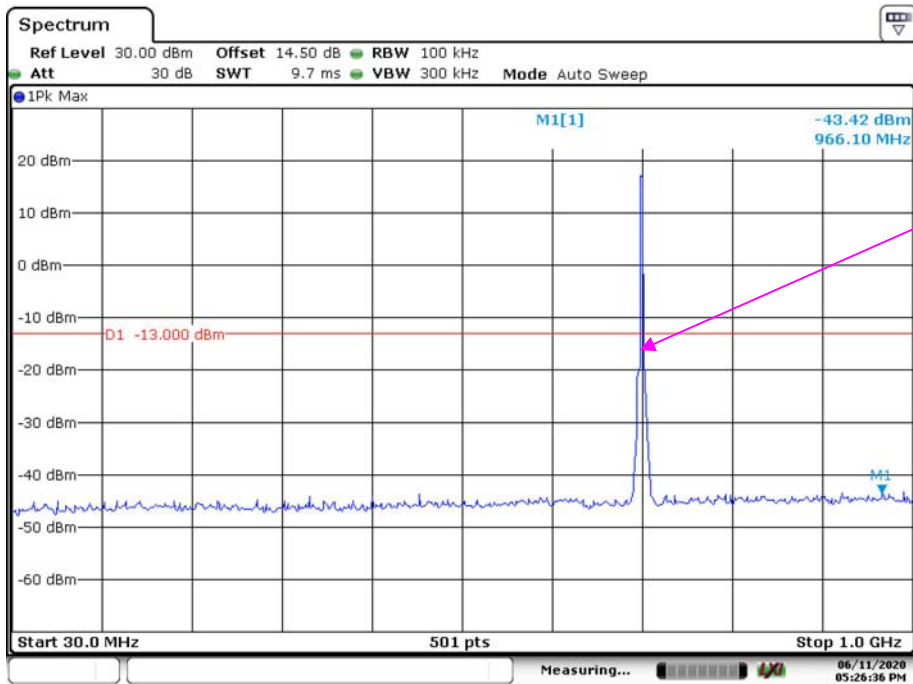
Fundamental

Date: 11.JUN.2020 17:25:37



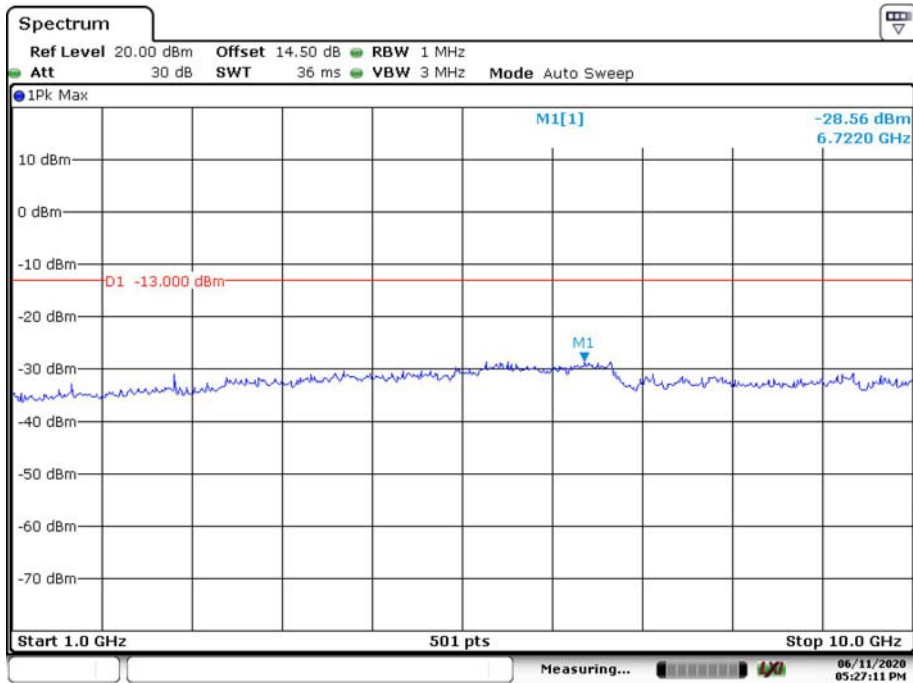
Date: 11.JUN.2020 17:25:59

3M QPSK Middle Channel



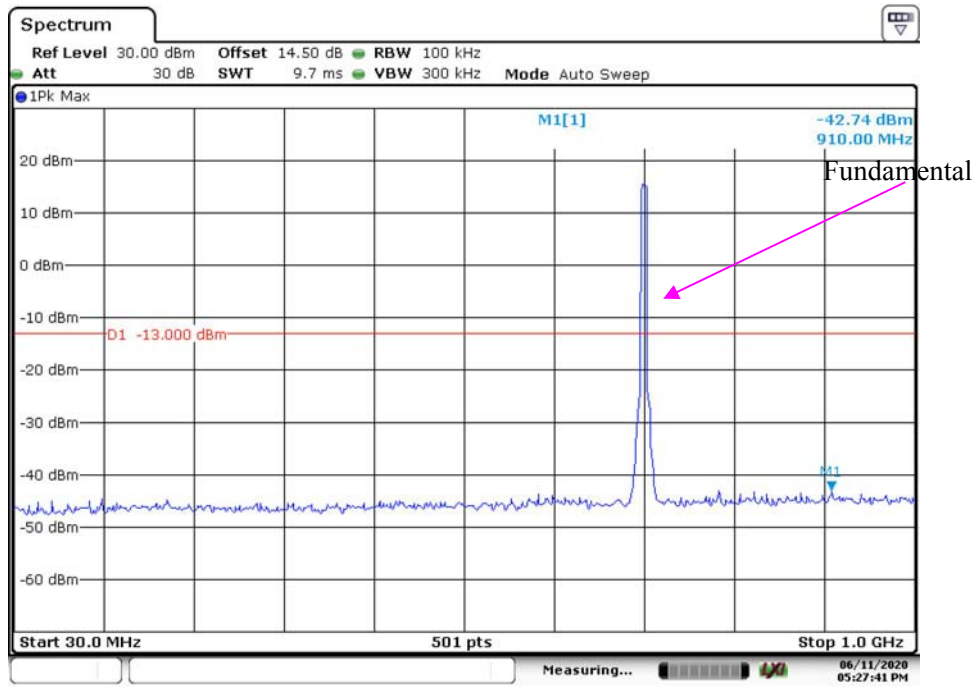
Fundamental

Date: 11.JUN.2020 17:26:36

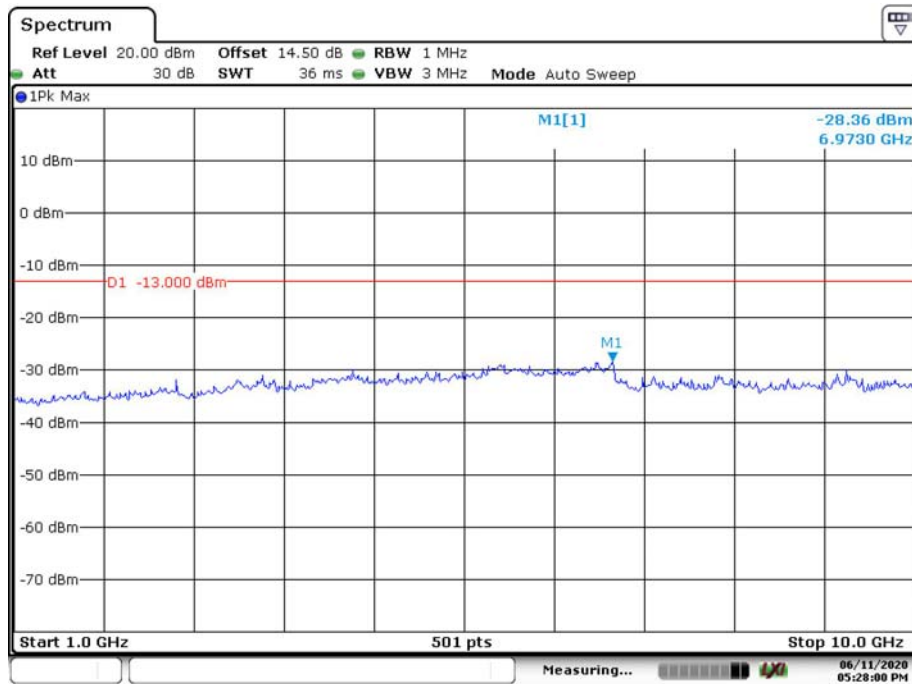


Date: 11.JUN.2020 17:27:11

5M QPSK Middle Channel

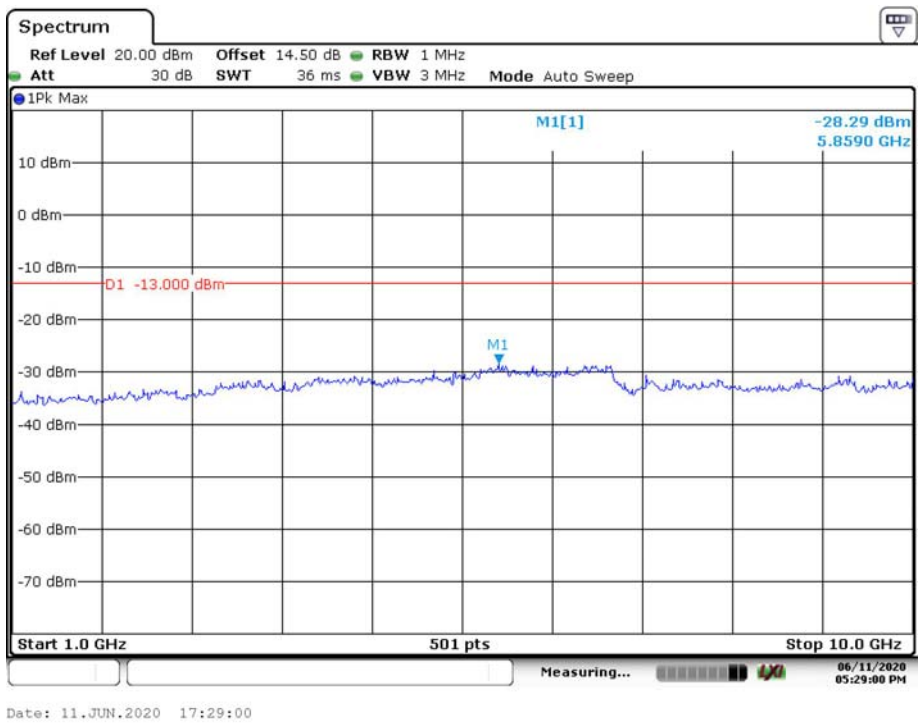
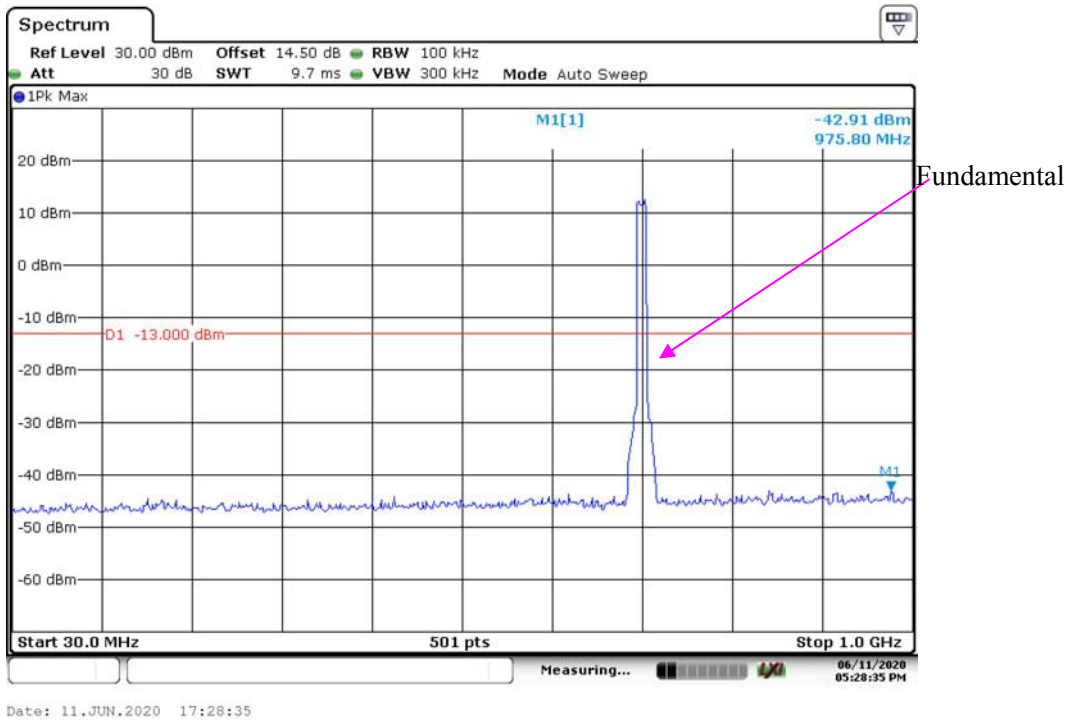


Date: 11.JUN.2020 17:27:41



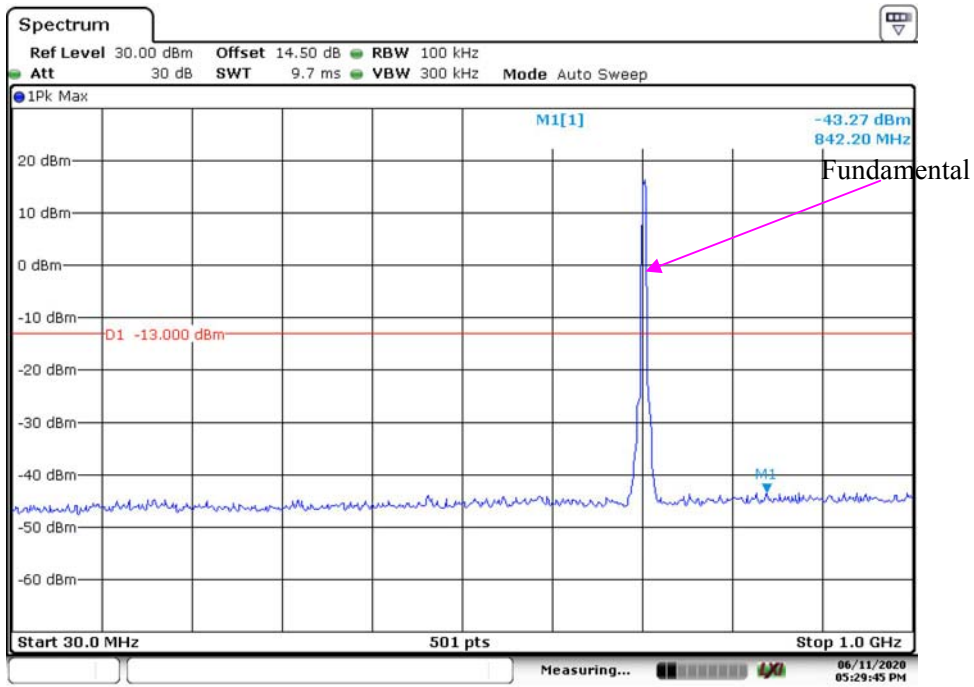
Date: 11.JUN.2020 17:28:00

10M QPSK Middle Channel

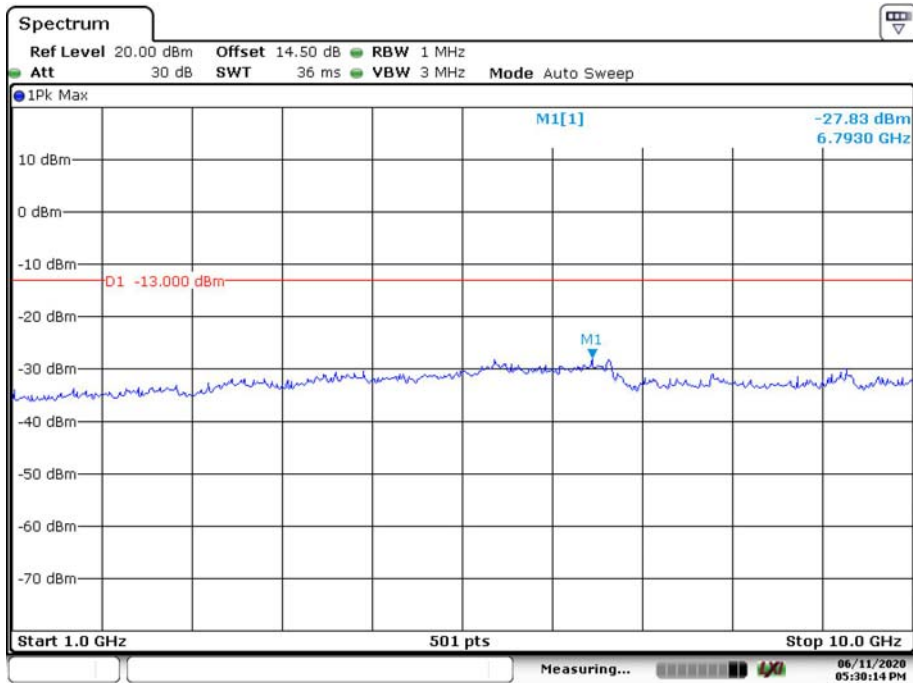


LTE Band 17:

5M QPSK Middle Channel

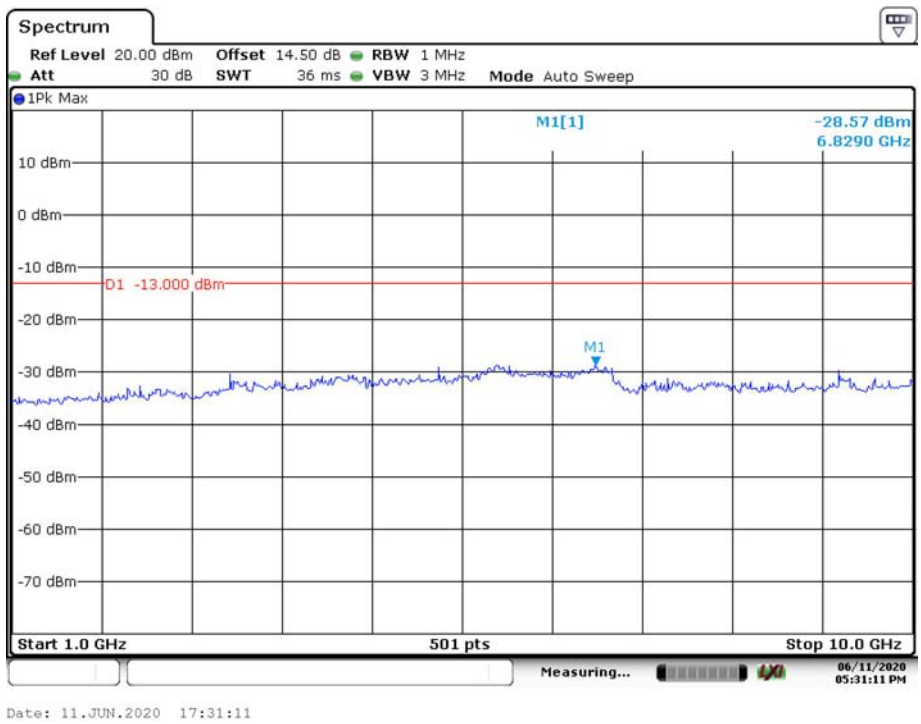
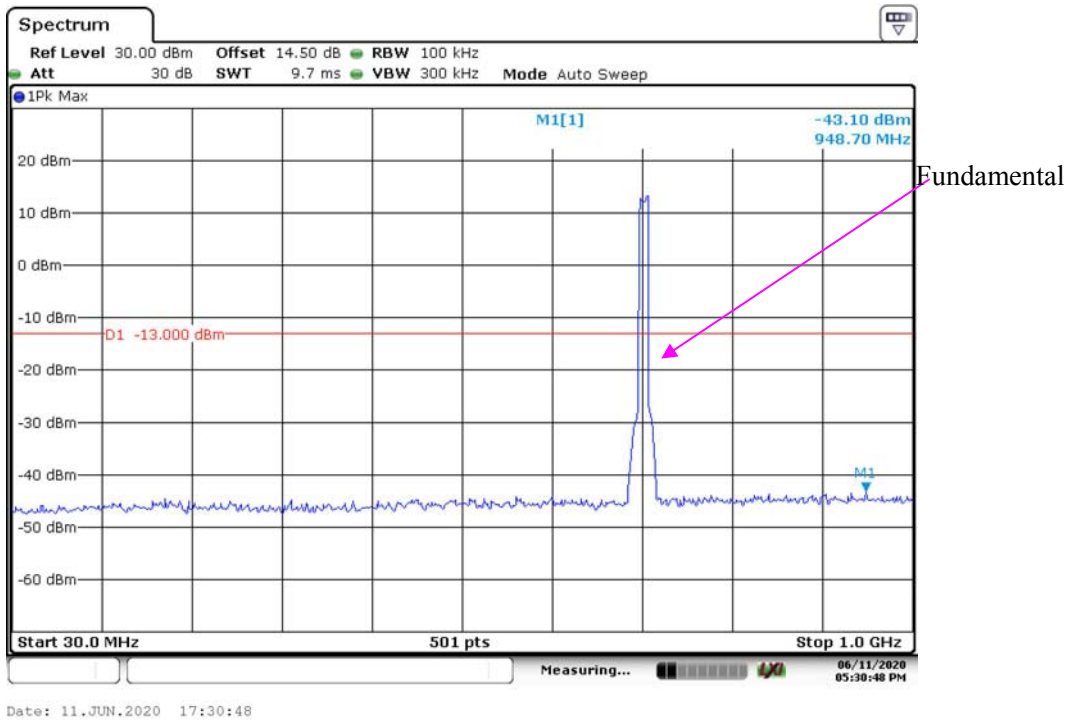


Date: 11.JUN.2020 17:29:45



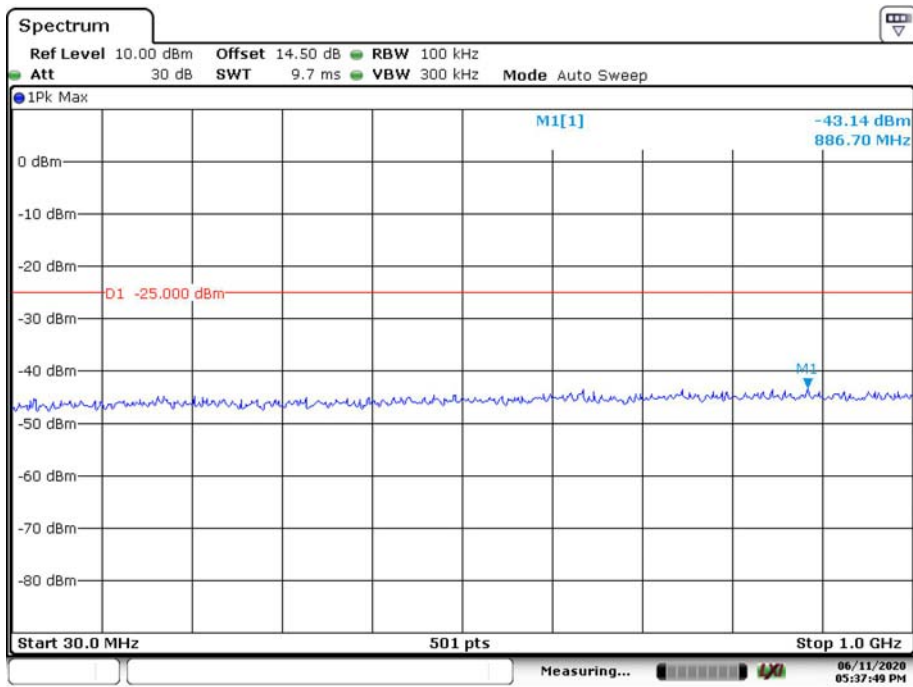
Date: 11.JUN.2020 17:30:14

10M QPSK Middle Channel

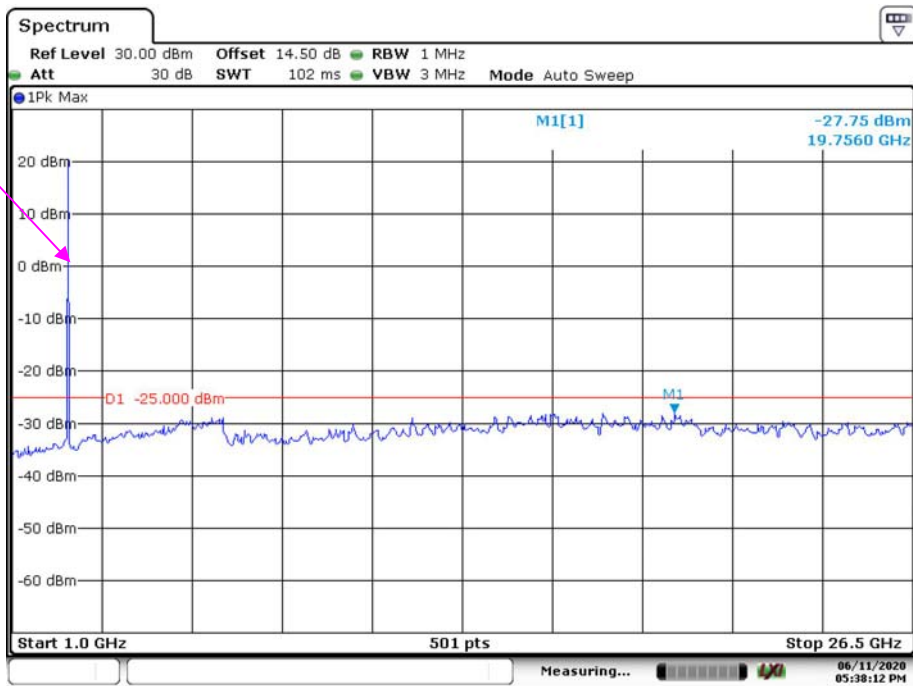


LTE Band 38:

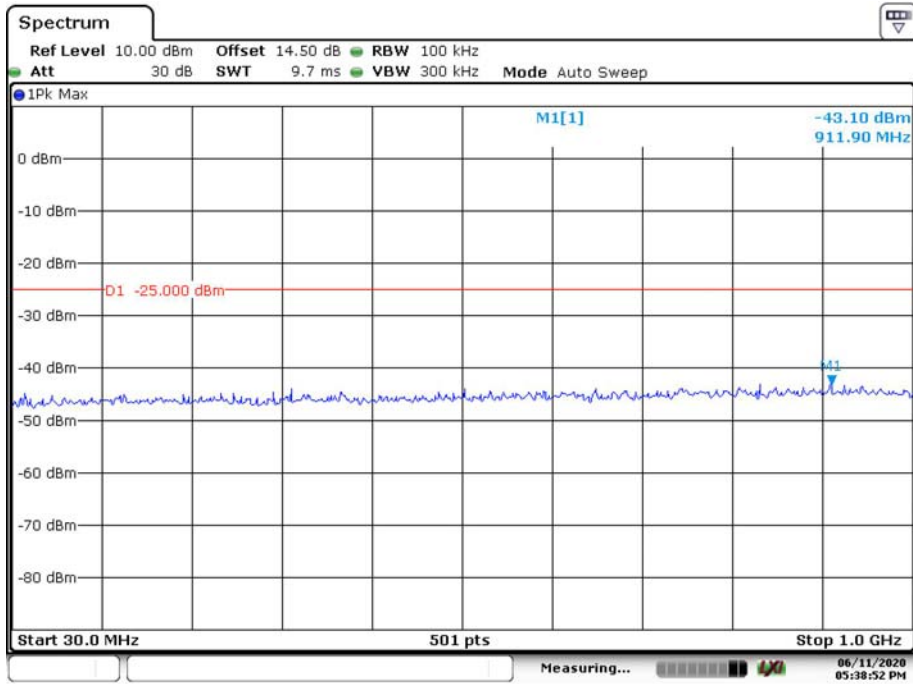
5M QPSK Middle Channel



Fundamental

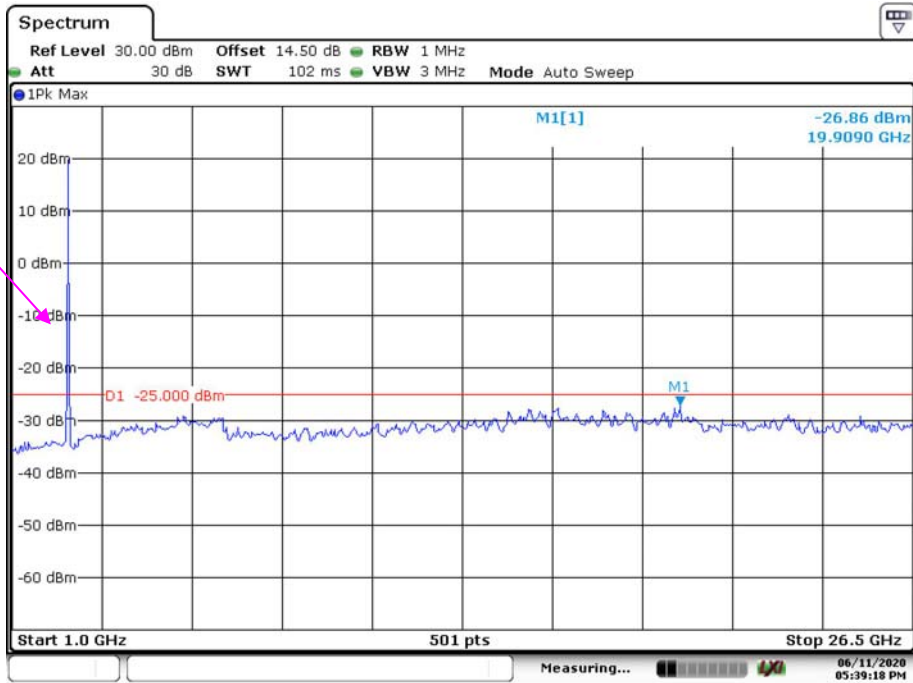


10M QPSK Middle Channel



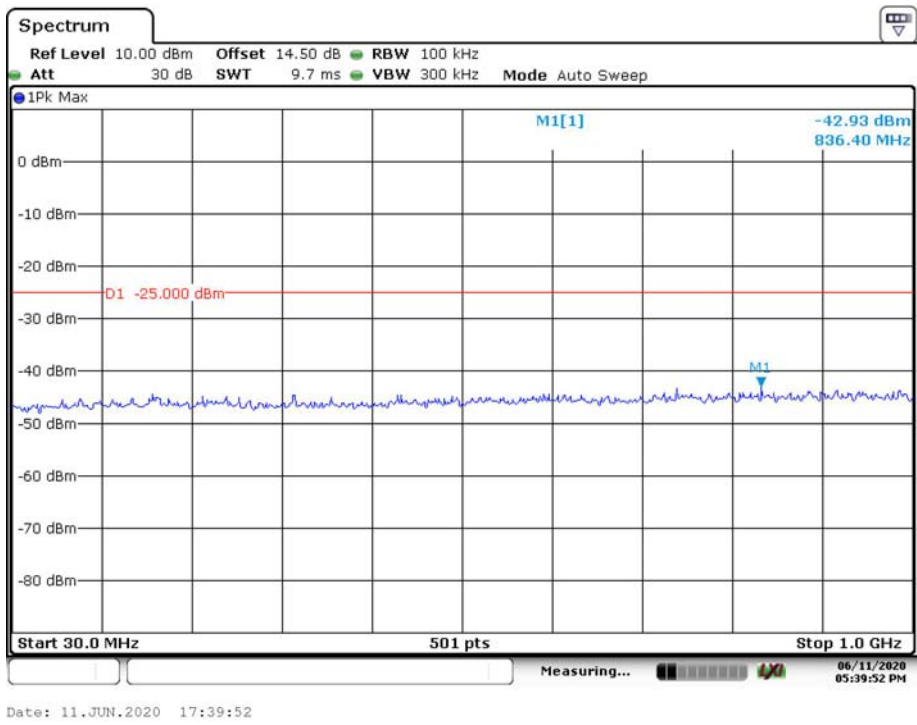
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Fundamental

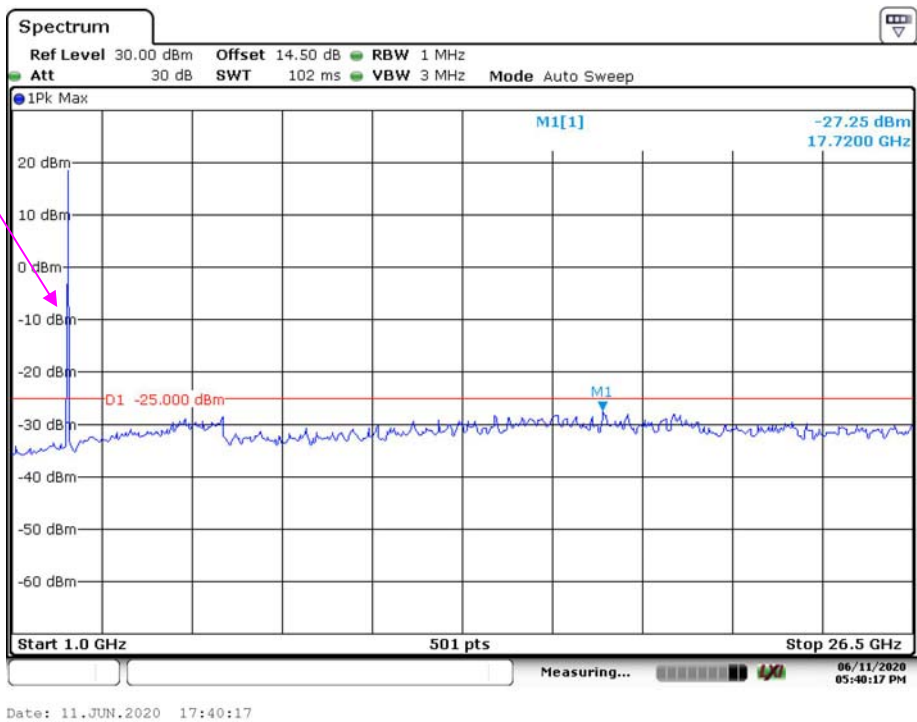


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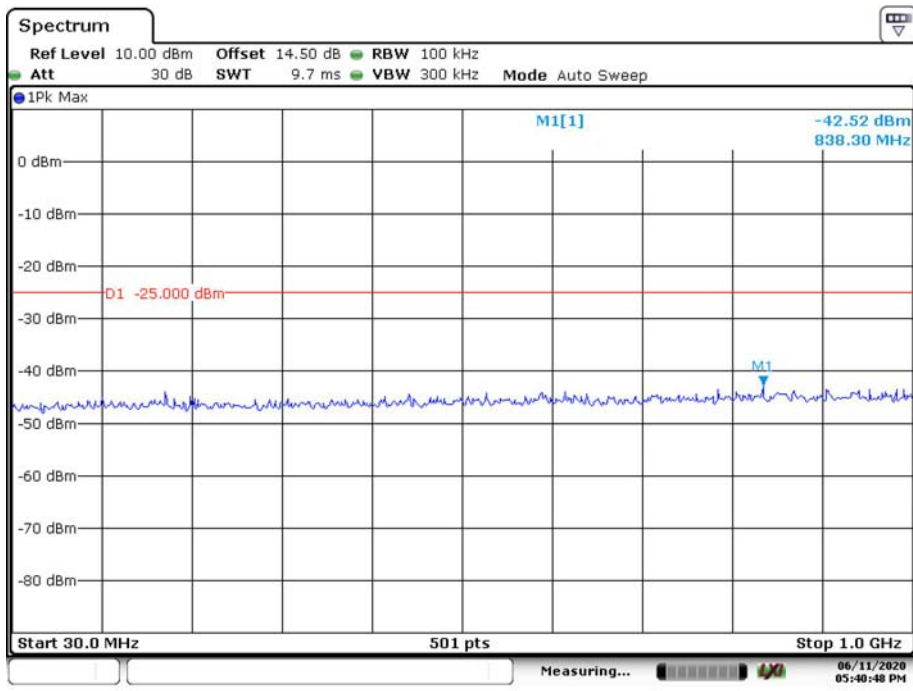
15M QPSK Middle Channel



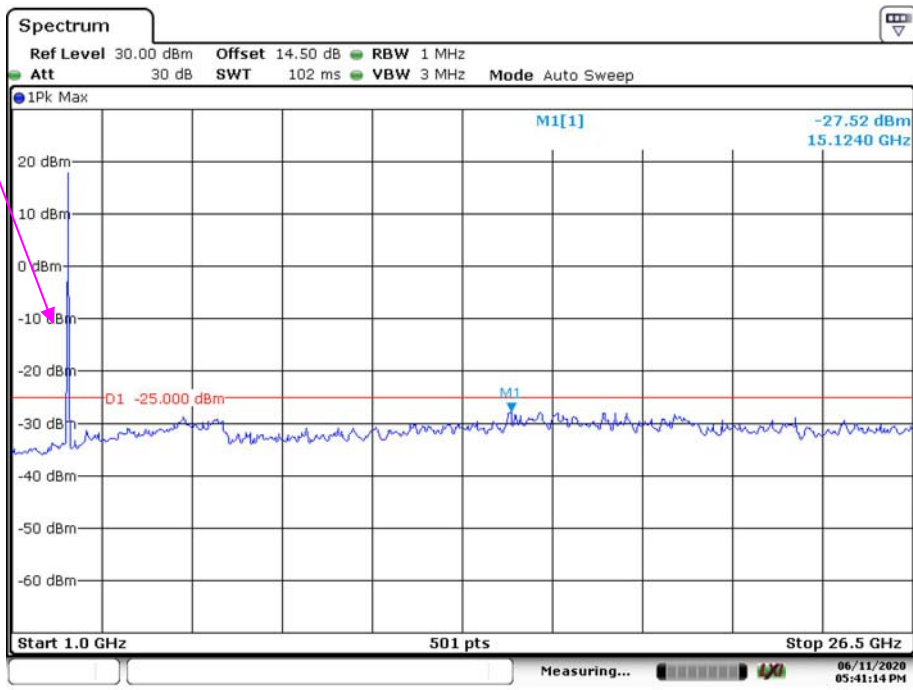
Fundamental



20M QPSK Middle Channel

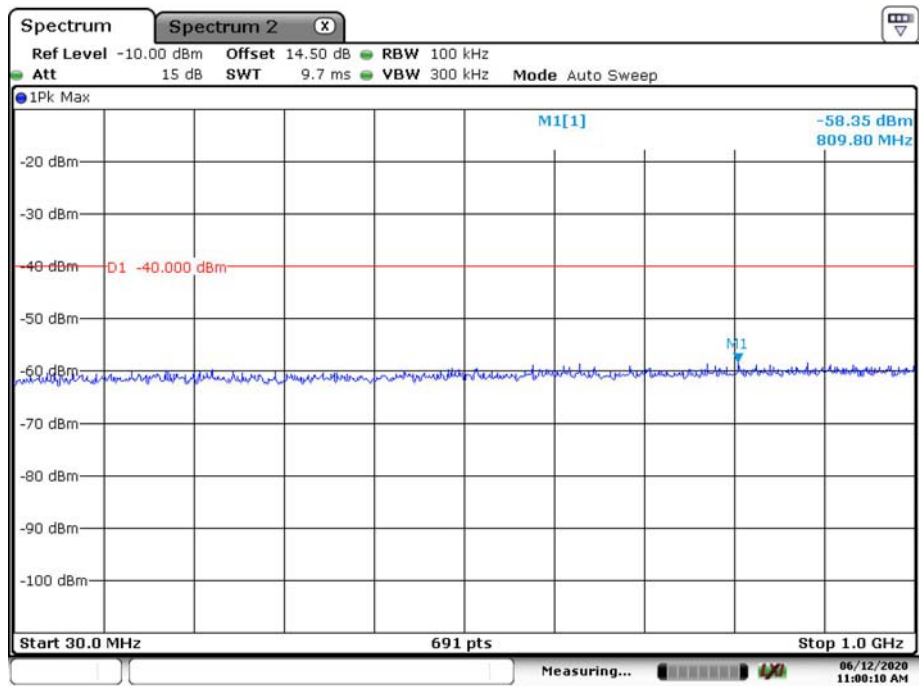


Fundamental



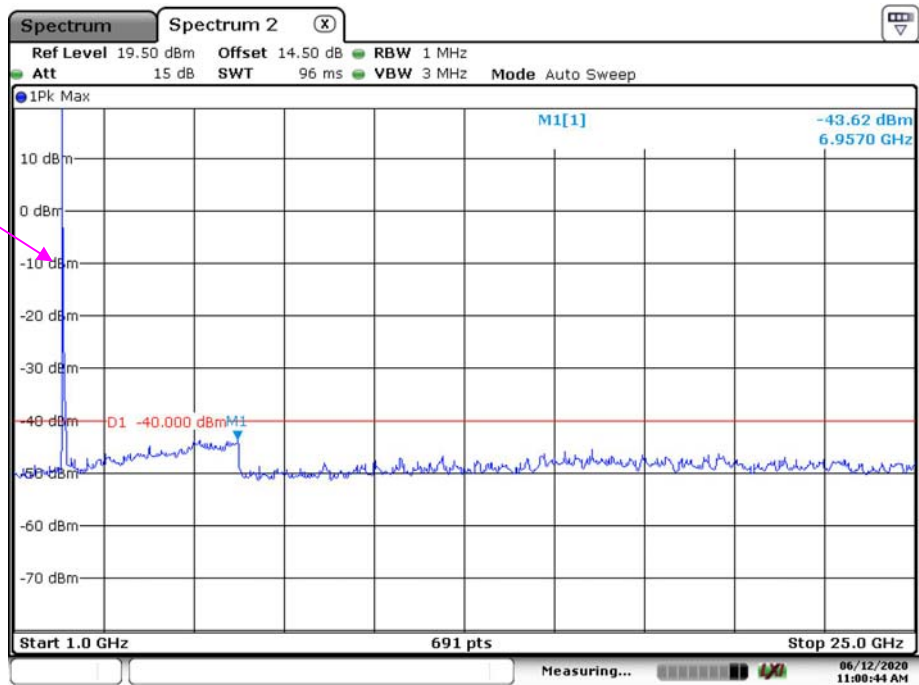
LTE Band 40 Lower:

QPSK_5 MHz



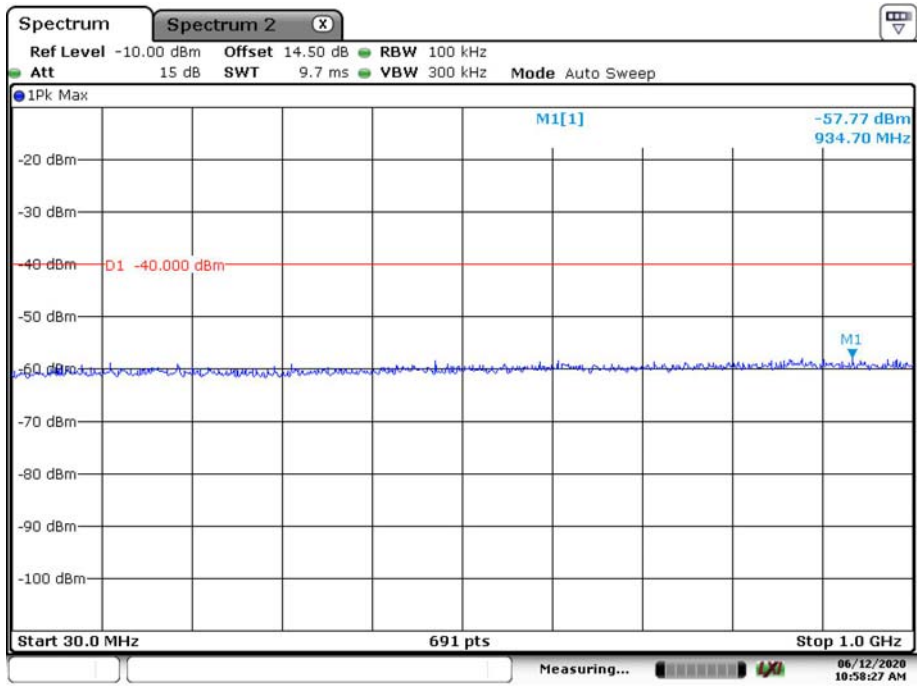
Date: 12.JUN.2020 11:00:11

Fundamental

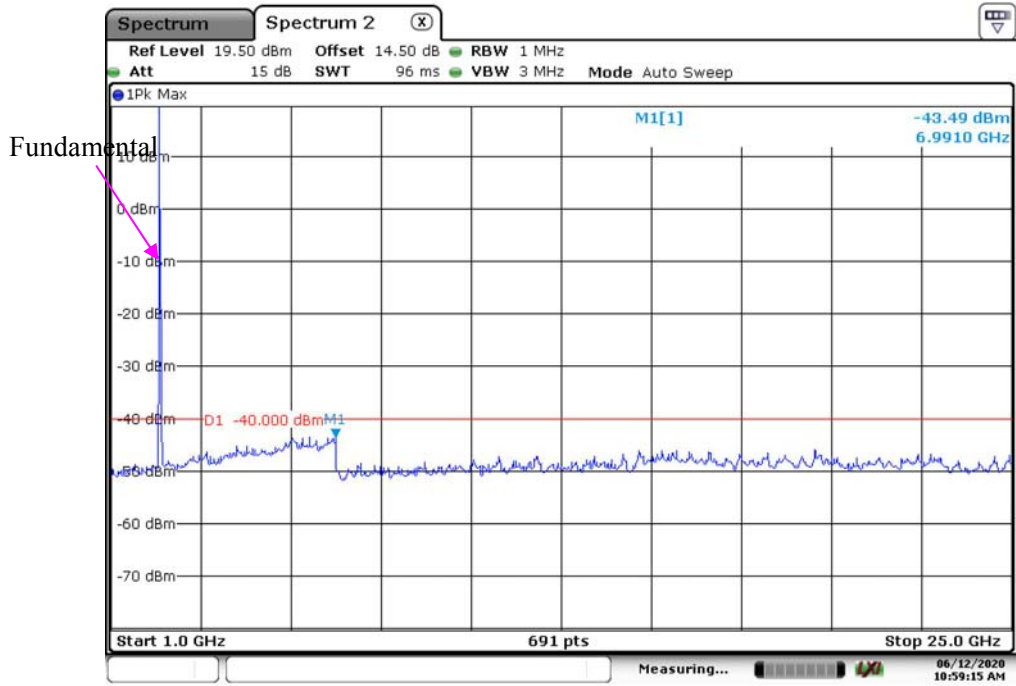


Date: 12.JUN.2020 11:00:45

QPSK_10 MHz



Date: 12.JUN.2020 10:58:27

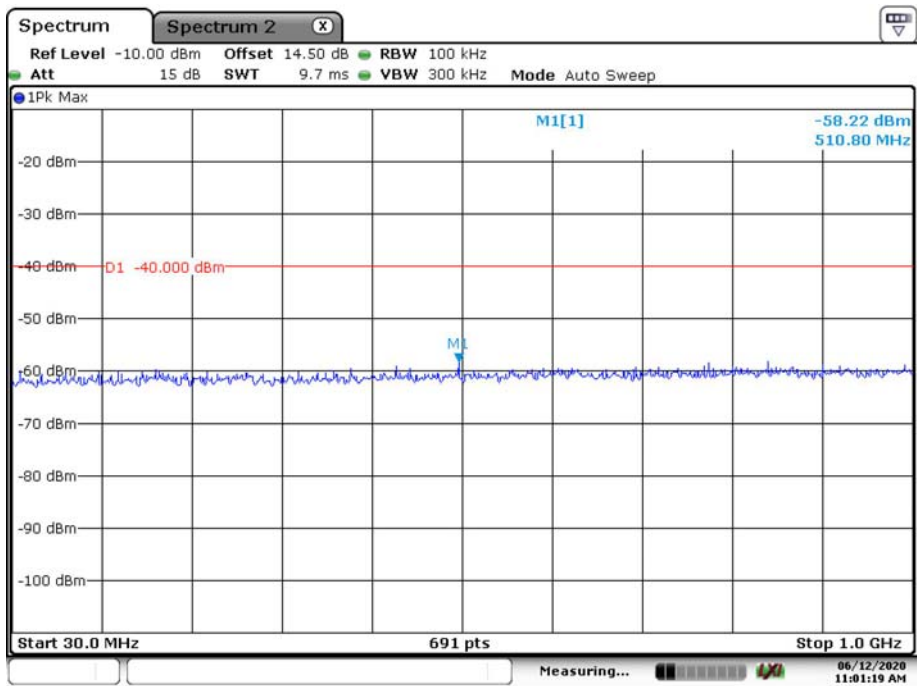


Fundamental

Date: 12.JUN.2020 10:59:16

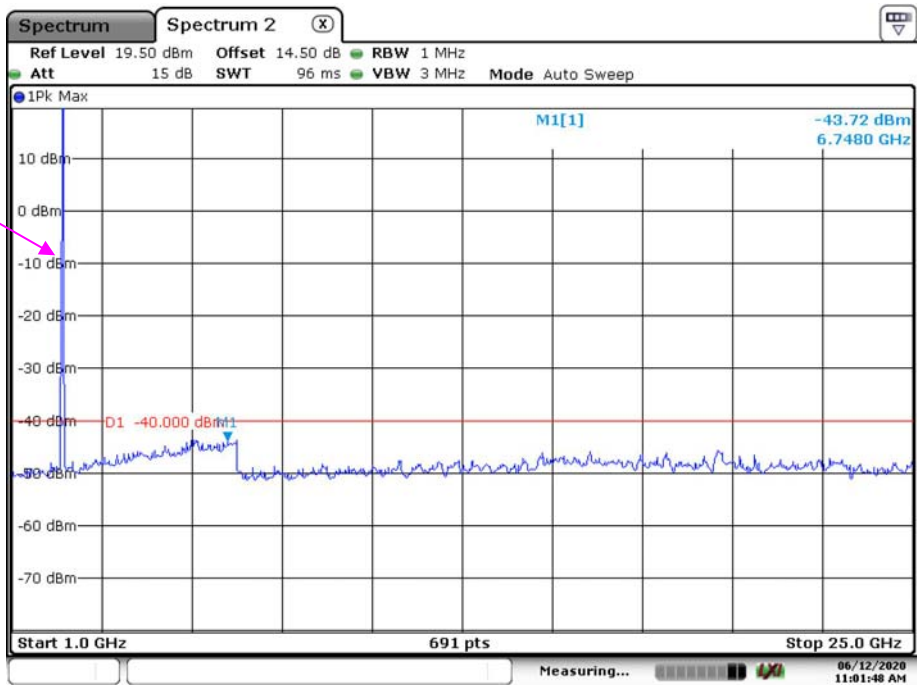
LTE Band 40 Upper:

QPSK_5 MHz



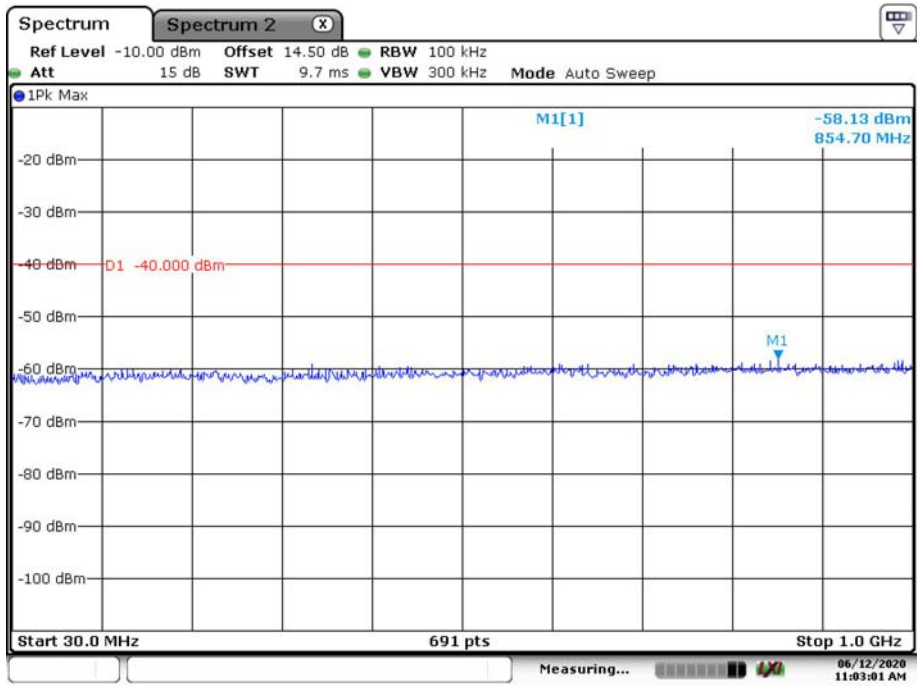
Date: 12.JUN.2020 11:01:20

Fundamental

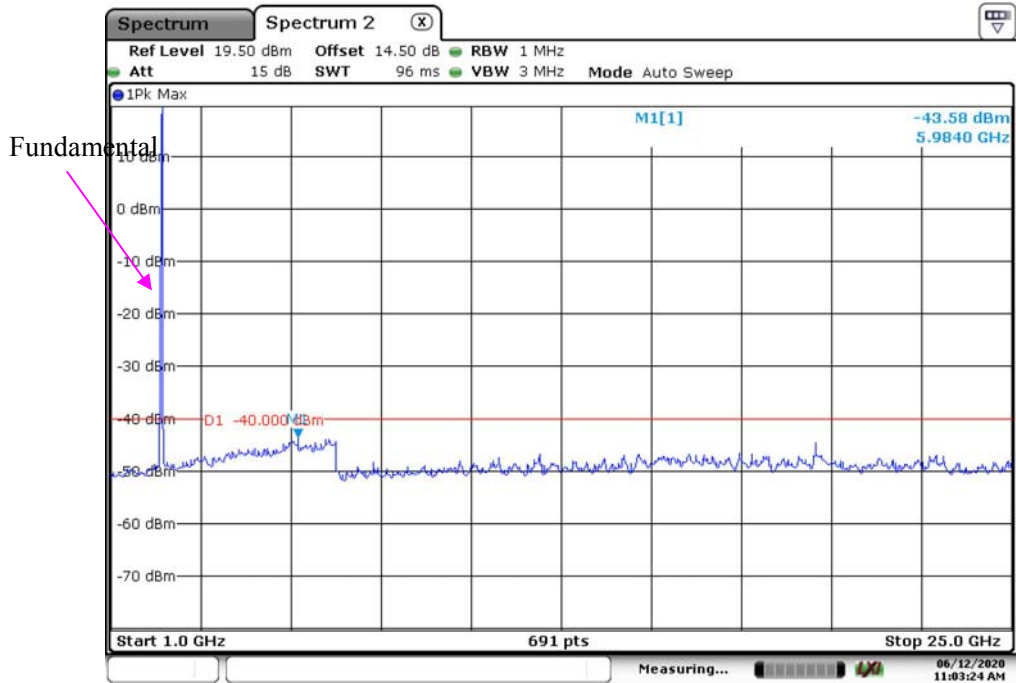


Date: 12.JUN.2020 11:01:49

QPSK_10 MHz



Date: 12.JUN.2020 11:03:02



Date: 12.JUN.2020 11:03:25

FCC §2.1053, §22.917 & §24.238 & §27.53- SPURIOUS RADIATED EMISSIONS

Applicable Standard

FCC § 2.1053, §22.917, § 24.238 and § 27.53;

Test Procedure

The transmitter was placed on a wooden turntable, and it was transmitting into a non-radiating load which was also placed on the turntable.

The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and polarization as well as EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. The test was performed by placing the EUT on 3-orthogonal axis.

The frequency range up to tenth harmonic of the fundamental frequency was investigated.

Remove the EUT and replace it with substitution antenna. A signal generator was connected to the substitution antenna by a non-radiating cable. The absolute levels of the spurious emissions were measured by the substitution.

Spurious emissions in dB = $10 \lg(\text{TXpwr in Watts}/0.001)$ – the absolute level

Spurious attenuation limit in dB = $43 + 10 \text{Log}_{10}(\text{power out in Watts})$

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	EMI Test Receiver	ESR3	102453	2019-06-26	2020-06-26
Sunol Sciences	Antenna	JB3	A060611-1	2017-11-10	2020-11-10
EMCO	Adjustable Dipole Antenna	3121C	9109-753	N/A	N/A
Unknown	Coaxial Cable	C-NJNJ-50	C-0400-01	2019-09-05	2020-09-05
Unknown	Coaxial Cable	C-NJNJ-50	C-0075-01	2019-09-05	2020-09-05
Unknown	Coaxial Cable	C-NJNJ-50	C-1400-01	2019-09-05	2020-09-05
Unknown	Coaxial Cable	C-NJNJ-50	C-0200-02	2019-09-05	2020-09-05
HP	Amplifier	8447D	2727A05902	2019-09-05	2020-09-05
Sinoscite	Band-stop filter	BSF824-862MS-1438-001	1438001	2019-06-16	2020-06-16
Agilent	Signal Generator	E8247C	MY43321350	2019-12-10	2020-12-10
Agilent	Spectrum Analyzer	E4440A	SG43360054	2020-05-09	2021-05-09
TDK RF	Horn Antenna	HRN-0118	130 084	2018-10-12	2021-10-12
ETS-Lindgren	Horn Antenna	3115	000 527 35	2018-10-12	2021-10-12
Unknown	Coaxial Cable	C-SJSJ-50	C-0800-01	2019-09-05	2020-09-05
Unknown	Coaxial Cable	C-NJNJ-50	C-0200-02	2019-09-05	2020-09-05
MITEQ	Amplifier	AFS42-00101800-25-S-42	2001271	2019-09-05	2020-09-05
Sinoscite	Band-stop filter	BSF1850-1910MS-0935V2	0935V2	2019-06-16	2020-06-16
Sinoscite	Band-stop filter	BSF1710-1785MN-0383-003	0383003	2019-06-16	2020-06-16
Sinoscite	Band-stop filter	BSF2300-2400MS-0777-003	0777003	2019-06-16	2020-06-16
Sinoscite	Band-stop filter	BSF2500-2750MS-1439-001	1437001	2019-06-16	2020-06-16
Ducommun Technologies	Horn Antenna	ARH-4223-02	1007726-01 1304	2017-12-06	2020-12-05
Ducommun Technologies	Horn Antenna	ARH-4223-02	1007726-02 1304	2017-12-06	2020-12-05
Quinstar	Amplifier	QLW-18405536-JO	15964001001	2019-06-27	2020-06-27

* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data

Environmental Conditions

Test Items	Radiation Below 1GHz	Radiation Above 1GHz
Temperature:	25.5°C	25.6°C
Relative Humidity:	53%	56%
ATM Pressure:	100.1kPa	100.1kPa
Tester:	Joker Chen	Bond Qin
Test Date:	2020-06-10	2020-06-10

Test Result: Compliance.

EUT Operation Mode: Transmitting

Cellular Band (PART 22H)

30 MHz-10 GHz:

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBµV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
GSM850, Frequency:836.600 MHz								
1673.200	H	46.56	-57.82	10.5	1.27	-48.6	-13.0	35.6
1673.200	V	51.00	-53.31	10.5	1.27	-44.1	-13.0	31.1
2509.800	H	37.98	-64.79	12.2	1.25	-53.8	-13.0	40.8
2509.800	V	37.26	-66.9	12.2	1.25	-56.0	-13.0	43.0
3346.400	H	38.43	-62.76	12.3	1.58	-52.1	-13.0	39.1
3346.400	V	37.66	-62.46	12.3	1.58	-51.8	-13.0	38.8
597.800	H	59.37	-42.81	0.0	0.76	-43.6	-13.0	30.6
597.800	V	40.03	-65.4	0.0	0.76	-66.2	-13.0	53.2
WCDMA Band V, Frequency:836.600 MHz								
1673.200	H	40.21	-64.17	10.5	1.27	-54.9	-13.0	41.9
1673.200	V	45.10	-59.21	10.5	1.27	-50.0	-13.0	37.0
2509.800	H	41.20	-61.57	12.2	1.25	-50.6	-13.0	37.6
2509.800	V	41.61	-62.55	12.2	1.25	-51.6	-13.0	38.6
3346.400	H	36.85	-64.34	12.3	1.58	-53.7	-13.0	40.7
3346.400	V	37.15	-62.97	12.3	1.58	-52.3	-13.0	39.3
710.100	H	38.15	-63	0.0	0.94	-63.9	-13.0	50.9
710.100	V	39.12	-64.63	0.0	0.94	-65.6	-13.0	52.6

Part 27

30 MHz-20 GHz:

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBµV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
WCDMA Band IV, Frequency: 1732.600 MHz								
3465.200	H	36.82	-64.15	12.2	1.6	-53.5	-13.0	40.5
3465.200	V	37.08	-62.48	12.2	1.6	-51.9	-13.0	38.9
5197.800	H	36.01	-60.07	12.9	1.36	-48.5	-13.0	35.5
5197.800	V	36.03	-60.02	12.9	1.36	-48.5	-13.0	35.5
844.900	H	36.95	-61.02	0.0	0.98	-62.0	-13.0	49.0
844.900	V	38.20	-62.75	0.0	0.98	-63.7	-13.0	50.7

PCS Band (PART 24E)**30 MHz-20 GHz:**

Frequency (MHz)	Polar (H/V)	Receiver Reading (dB μ V)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
GSM1900, Frequency:1880.000 MHz								
3760.000	H	48.14	-52.07	12.3	1.53	-41.4	-13.0	28.4
3760.000	V	52.73	-47.18	12.3	1.53	-36.5	-13.0	23.5
5640.000	H	37.67	-57.63	13.0	1.28	-45.9	-13.0	32.9
5640.000	V	38.04	-57.57	13.0	1.28	-45.9	-13.0	32.9
597.800	H	58.63	-43.55	0.0	0.76	-44.3	-13.0	31.3
597.800	V	59.16	-46.27	0.0	0.76	-47.0	-13.0	34.0
WCDMA Band II, Frequency:1880.000 MHz								
3760.000	H	45.49	-54.72	12.3	1.53	-44.0	-13.0	31.0
3760.000	V	37.57	-62.34	12.3	1.53	-51.6	-13.0	38.6
5640.000	H	35.20	-60.1	13.0	1.28	-48.4	-13.0	35.4
5640.000	V	35.33	-60.28	13.0	1.28	-48.6	-13.0	35.6
844.900	H	37.58	-60.39	0.0	0.98	-61.4	-13.0	48.4
844.900	V	37.37	-63.58	0.0	0.98	-64.6	-13.0	51.6

LTE Band 2 (30MHz-20GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dB μ V)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
QPSK, Frequency:1880.000 MHz								
3760.00	H	39.57	-58.07	13.76	1.63	-45.94	-13.00	32.94
3760.00	V	41.99	-55.51	13.76	1.63	-43.38	-13.00	30.38
5640.00	H	36.28	-57.31	14.02	1.31	-44.60	-13.00	31.60
5640.00	V	35.61	-57.87	14.02	1.31	-45.16	-13.00	32.16
844.90	H	38.17	-59.80	0.00	0.98	-60.78	-13.00	47.78
30.00	V	40.80	-26.58	-26.30	0.27	-53.15	-13.00	40.15

LTE Band 4(30MHz-20GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dB μ V)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
QPSK, Frequency: 1732.500 MHz								
3465.00	H	37.87	-61.32	13.91	1.62	-49.03	-13.00	36.03
3465.00	V	38.78	-60.44	13.91	1.62	-48.15	-13.00	35.15
5197.50	H	35.85	-58.84	14.00	1.52	-46.36	-13.00	33.36
5197.50	V	35.62	-59.14	14.00	1.52	-46.66	-13.00	33.66
844.90	H	37.67	-60.30	0.00	0.98	-61.28	-13.00	48.28
30.00	V	40.62	-26.76	-26.30	0.27	-53.33	-13.00	40.33

LTE Band 5 (30MHz-10GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBµV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
QPSK, Frequency: 836.500 MHz								
1673.00	H	41.86	-62.08	10.61	0.73	-52.20	-13.00	39.20
1673.00	V	44.19	-60.35	10.61	0.73	-50.47	-13.00	37.47
2509.50	H	43.57	-59.34	13.11	1.25	-47.48	-13.00	34.48
2509.50	V	45.83	-57.11	13.11	1.25	-45.25	-13.00	32.25
3346.00	H	36.41	-63.27	13.83	1.61	-51.05	-13.00	38.05
3346.00	V	36.03	-63.69	13.83	1.61	-51.47	-13.00	38.47
43.30	H	41.00	-56.30	-22.04	0.21	-78.55	-13.00	65.55
30.00	V	40.62	-26.76	-26.30	0.27	-53.33	-13.00	40.33

LTE Band 7 (30MHz-26.5GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBµV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
QPSK, Frequency: 2535.000 MHz								
5070.00	H	39.58	-55.53	13.93	1.34	-42.94	-25.00	17.94
5070.00	V	38.08	-56.84	13.93	1.34	-44.25	-25.00	19.25
7605.00	H	35.59	-53.29	13.21	1.40	-41.48	-25.00	16.48
7605.00	V	36.30	-52.98	13.21	1.40	-41.17	-25.00	16.17
844.90	H	38.16	-59.81	0.00	0.98	-60.79	-25.00	35.79
30.00	V	40.15	-27.23	-26.30	0.27	-53.80	-25.00	28.80

LTE Band 12 (30MHz-10GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBµV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
QPSK, Frequency: 707.500 MHz								
1415.00	H	38.81	-64.80	9.08	1.22	-56.94	-13.00	43.94
1415.00	V	40.76	-63.37	9.08	1.22	-55.51	-13.00	42.51
2122.50	H	39.17	-62.84	11.27	1.11	-52.68	-13.00	39.68
2122.50	V	40.04	-61.95	11.27	1.11	-51.79	-13.00	38.79
2830.00	H	36.87	-64.55	13.34	1.36	-52.57	-13.00	39.57
2830.00	V	36.54	-65.11	13.34	1.36	-53.13	-13.00	40.13
844.90	H	38.09	-59.88	0.00	0.98	-60.86	-13.00	47.86
30.00	V	41.16	-26.22	-26.30	0.27	-52.79	-13.00	39.79

LTE Band 17 (30MHz-10GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBµV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
QPSK, Frequency: 710.000 MHz								
1420.00	H	38.64	-65.04	9.10	1.23	-57.17	-13.00	44.17
1420.00	V	39.45	-64.73	9.10	1.23	-56.86	-13.00	43.86
2130.00	H	37.61	-64.39	11.22	1.11	-54.28	-13.00	41.28
2130.00	V	36.58	-65.39	11.22	1.11	-55.28	-13.00	42.28
2840.00	H	36.43	-64.89	13.42	1.36	-52.83	-13.00	39.83
2840.00	V	37.07	-64.49	13.42	1.36	-52.43	-13.00	39.43
844.90	H	37.66	-60.31	0.00	0.98	-61.29	-13.00	48.29
30.00	V	40.47	-26.91	-26.30	0.27	-53.48	-13.00	40.48

LTE Band 38 (30MHz-26.5GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBµV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
QPSK, Frequency: 2595.000 MHz								
5190.00	H	37.87	-56.82	13.99	1.51	-44.34	-25.00	19.34
5190.00	V	37.27	-57.47	13.99	1.51	-44.99	-25.00	19.99
7785.00	H	36.06	-53.26	13.32	1.53	-41.47	-25.00	16.47
7785.00	V	35.52	-54.05	13.32	1.53	-42.26	-25.00	17.26
844.90	H	38.17	-59.80	0.00	0.98	-60.78	-25.00	35.78
30.00	V	39.70	-27.68	-26.30	0.27	-54.25	-25.00	29.25

LTE Band 40 Lower(30MHz-25GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBµV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
QPSK, Frequency: 2310.000 MHz								
4620.00	H	35.13	-61.97	14.24	1.81	-49.54	-40.00	9.54
4620.00	V	32.76	-64.44	14.24	1.81	-52.01	-40.00	12.01
6930.00	H	35.28	-55.41	13.64	1.81	-43.58	-40.00	3.58
6930.00	V	35.93	-54.63	13.64	1.81	-42.80	-40.00	2.80
844.90	H	38.21	-59.76	0.00	0.98	-60.74	-40.00	20.74
30.00	V	40.24	-27.14	-26.30	0.27	-53.71	-40.00	13.71

LTE Band 40 Upper(30MHz-25GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dB μ V)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
QPSK, Frequency: 2355.000 MHz								
4710.00	H	40.06	-57.06	14.39	1.66	-44.33	-40.00	4.33
4710.00	V	37.61	-59.60	14.39	1.66	-46.87	-40.00	6.87
7065.00	H	36.58	-53.66	13.31	1.76	-42.11	-40.00	2.11
7065.00	V	36.27	-53.88	13.31	1.76	-42.33	-40.00	2.33
844.90	H	38.09	-59.88	0.00	0.98	-60.86	-40.00	20.86
30.00	V	39.47	-27.91	-26.30	0.27	-54.48	-40.00	14.48

Note:

- 1) The unit of Antenna Gain is dBd for frequency below 1GHz, and the unit of Antenna Gain is dBi for frequency above 1GHz.
- 2) Absolute Level = Substituted Level - Cable loss + Antenna Gain
- 3) Margin = Limit - Absolute Level

FCC §22.917(a) & §24.238(a) & §27.53 - BAND EDGES

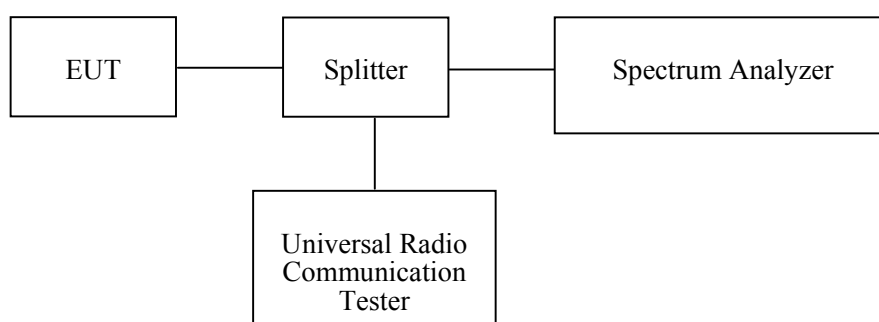
Applicable Standard

FCC § 2.1053, §22.917, § 24.238 and § 27.53

Test Procedure

The RF output of the transmitter was connected to the input of the spectrum analyzer through sufficient attenuation.

The center of the spectrum analyzer was set to block edge frequency.



Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40	101474	2020-01-09	2021-01-09
Unknown	Coaxial Cable	C-SJ00-0010	C0010/04	Each time	N/A
E-Microwave	Blocking Control	EMDCB-00036	0E01201048	Each time	N/A
E-Microwave	Coaxial Attenuators	EMCA10-5RN-6	OE01203239	Each time	N/A
E-Microwave	Two-way Splitter	ODP-1-6-2S	OE0120142	Each time	N/A

* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data

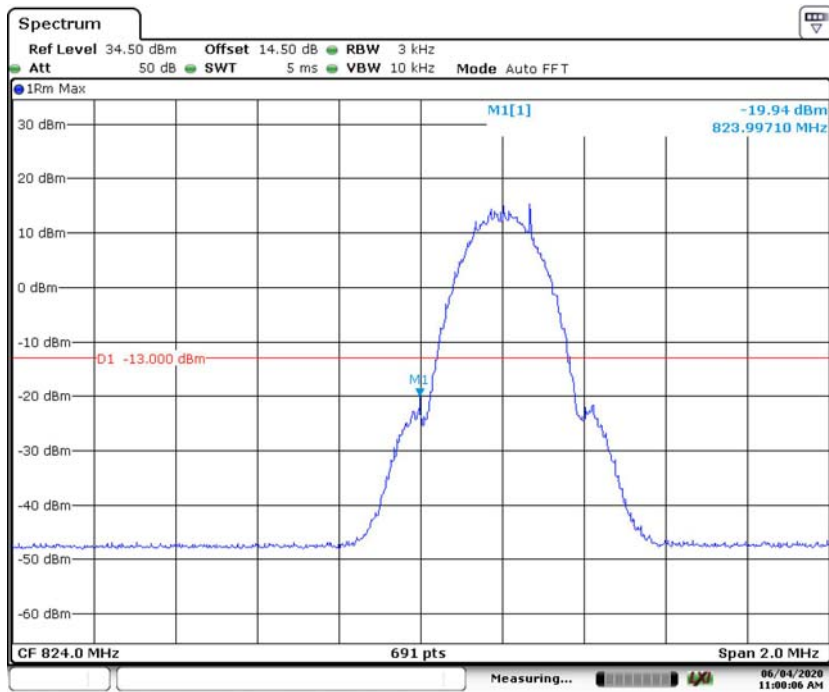
Environmental Conditions

Temperature:	26.1°C~ 27.4 °C
Relative Humidity:	66%~73 %
ATM Pressure:	99.8kPa ~100.9kPa
Tester:	Rita Huang
Test Date:	2020-06-04~2020-07-29

Test Mode: Transmitting

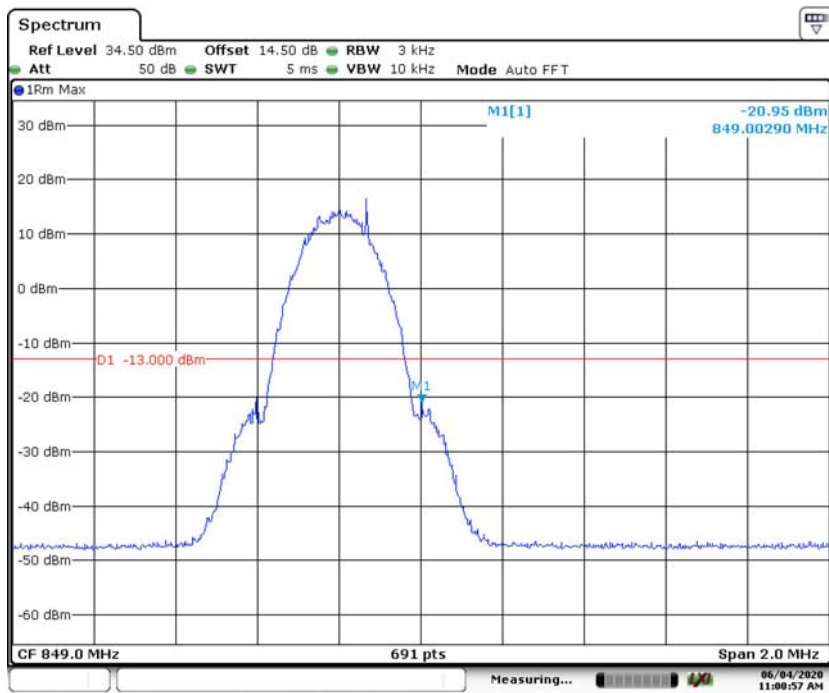
Test Result: Compliance. Please refer to the following plots.

GSM 850, Left Band Edge



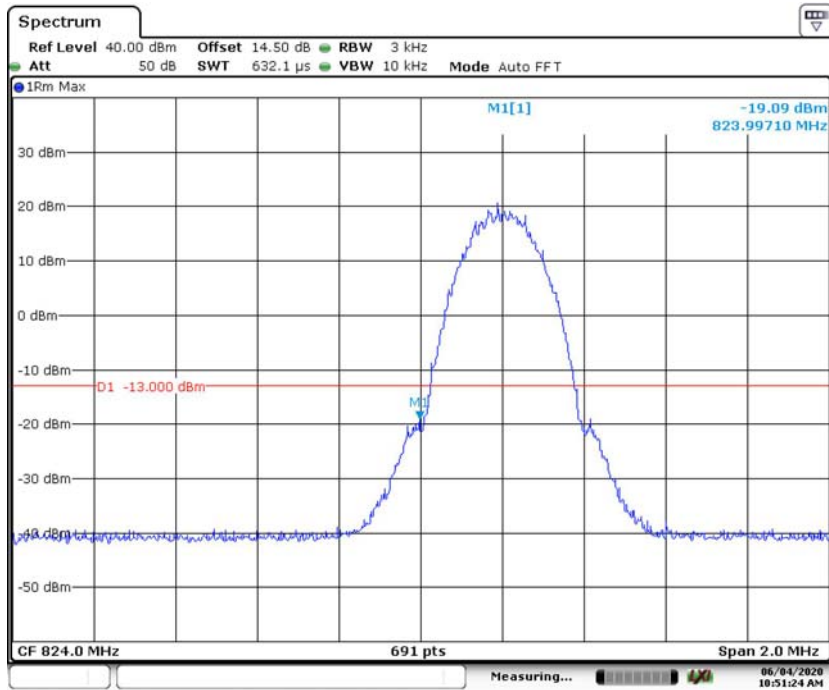
Date: 4.JUN.2020 11:00:07

GSM 850, Right Band Edge



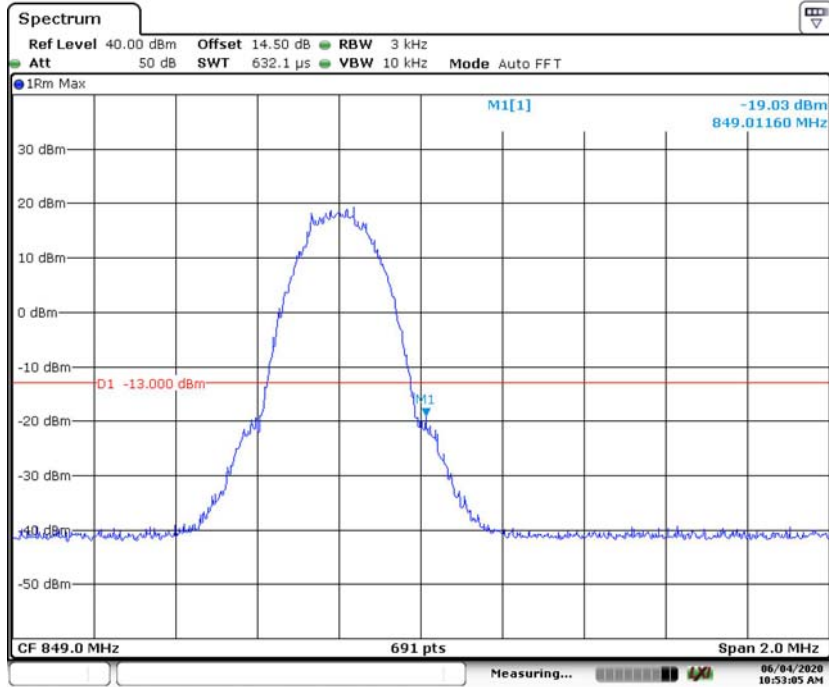
Date: 4.JUN.2020 11:00:58

EDGE 850, Left Band Edge



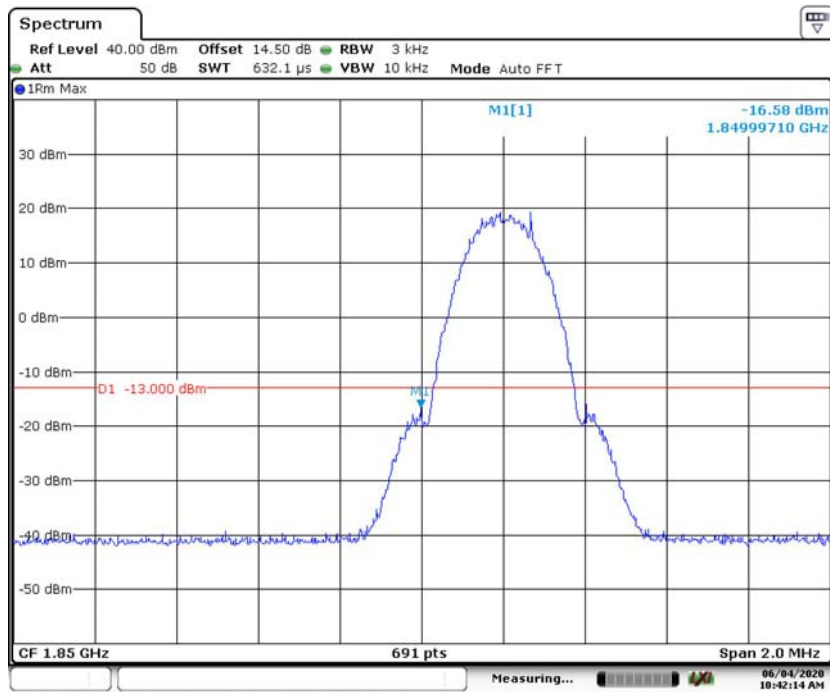
Date: 4.JUN.2020 10:51:25

EDGE 850, Right Band Edge



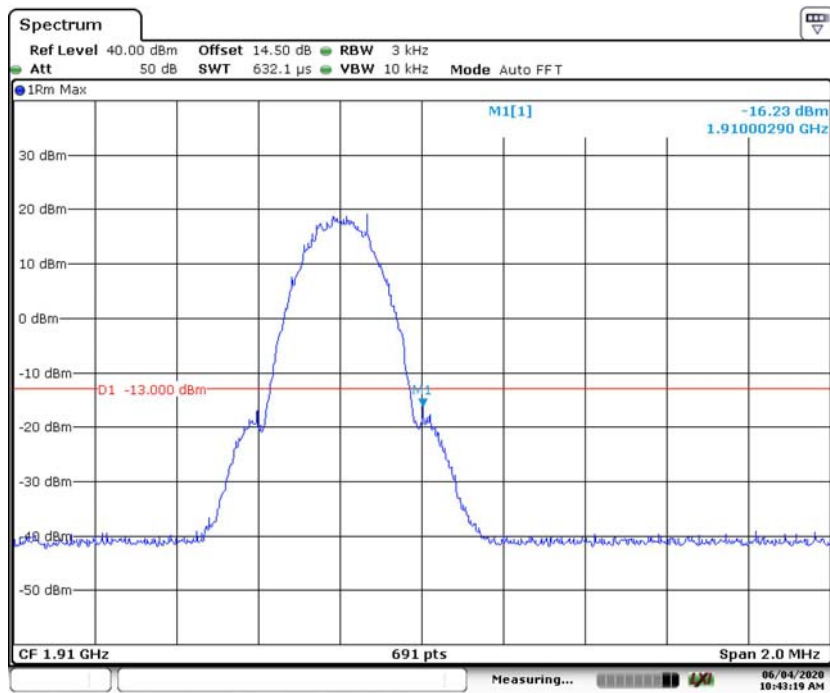
Date: 4.JUN.2020 10:53:06

GSM 1900, Left Band Edge



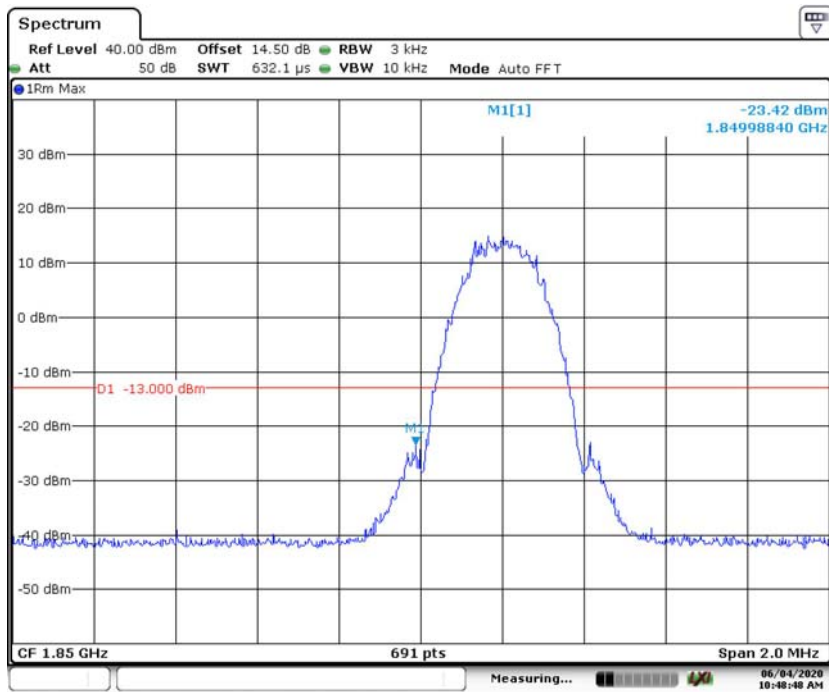
Date: 4.JUN.2020 10:42:14

GSM 1900, Right Band Edge



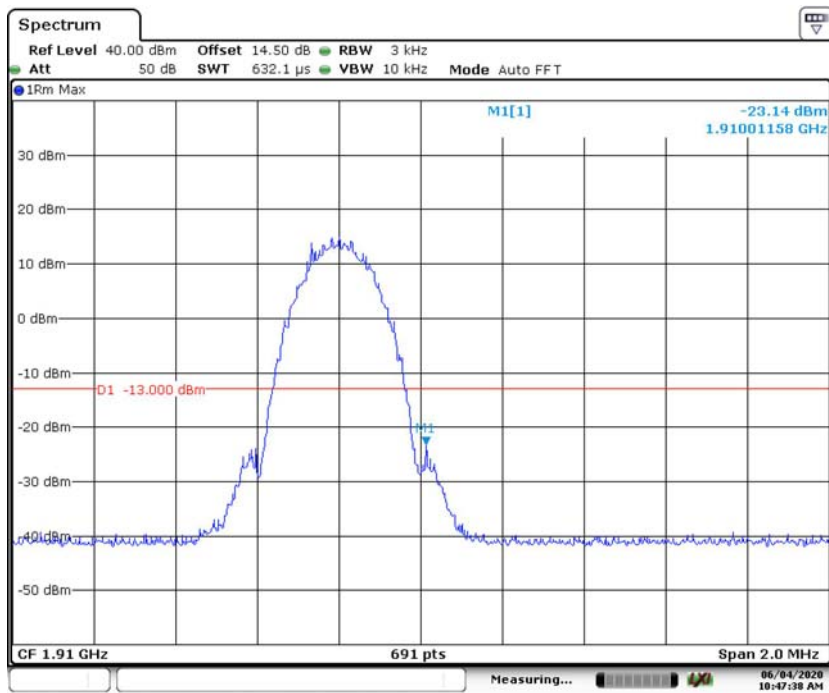
Date: 4.JUN.2020 10:43:20

EDGE 1900, Left Band Edge



Date: 4.JUN.2020 10:48:48

EDGE 1900, Right Band Edge



Date: 4.JUN.2020 10:47:38