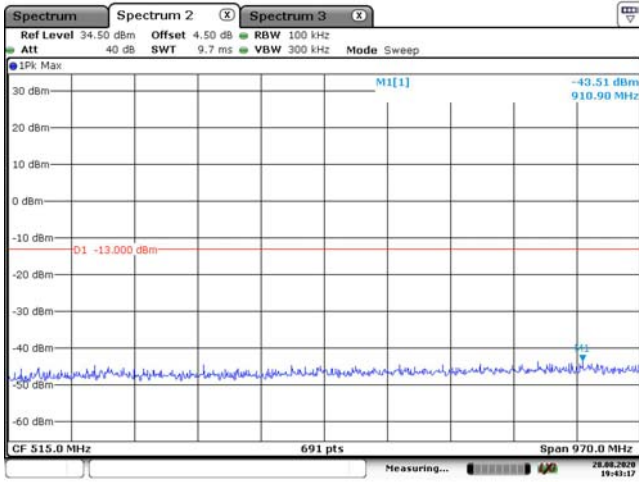
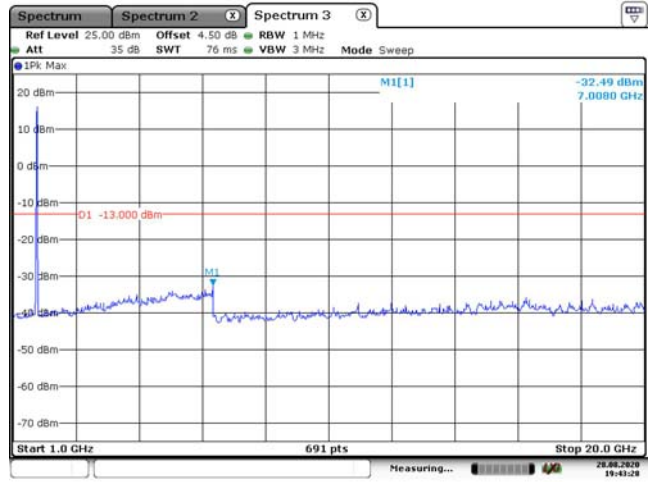


20M, QPSK, Low Channel

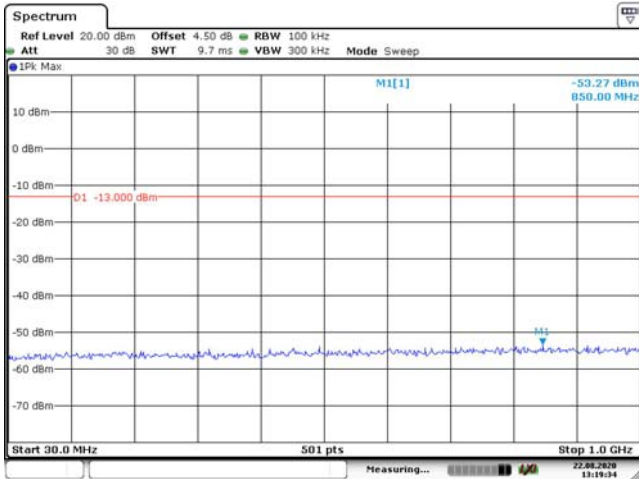


Date: 28.AUG.2020 19:43:18

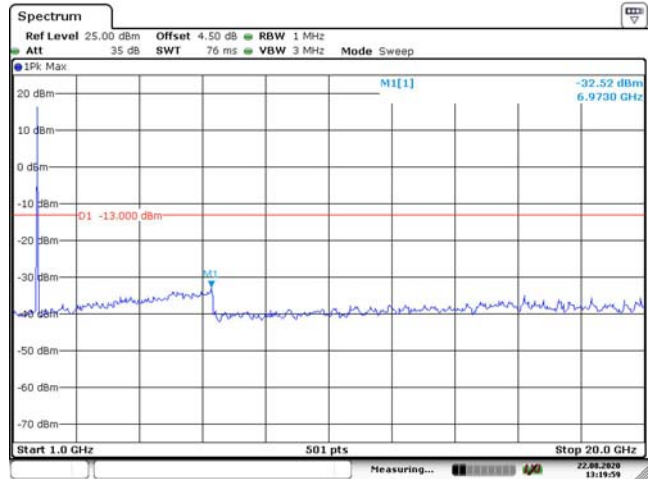


Date: 28.AUG.2020 19:43:29

20M, QPSK, Middle Channel

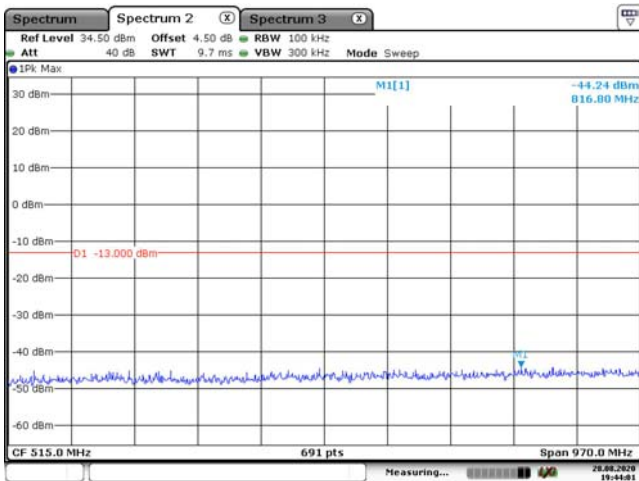


Date: 22.AUG.2020 13:19:34

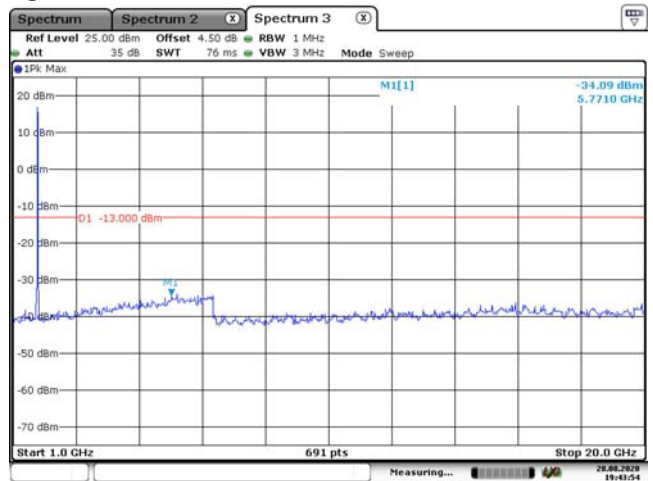


Date: 22.AUG.2020 13:19:59

20M, QPSK, High Channel



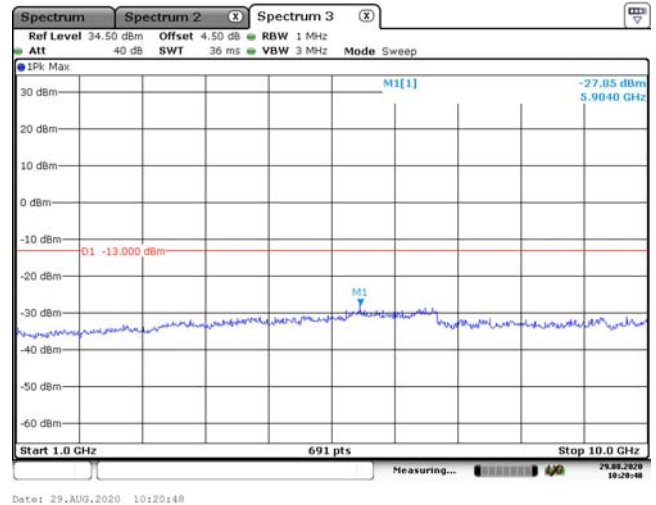
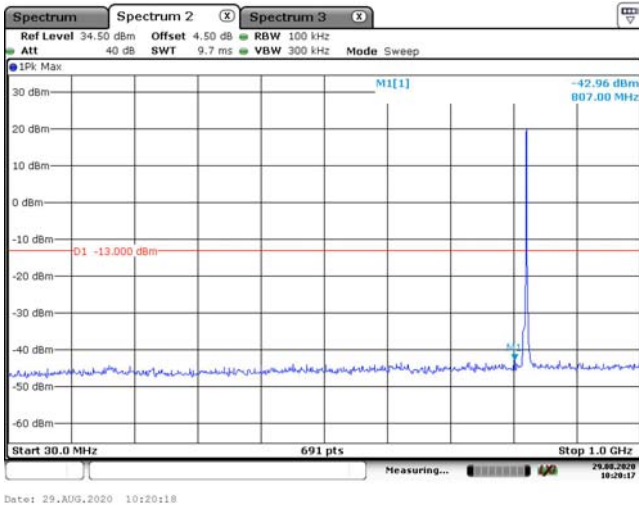
Date: 28.AUG.2020 19:44:02



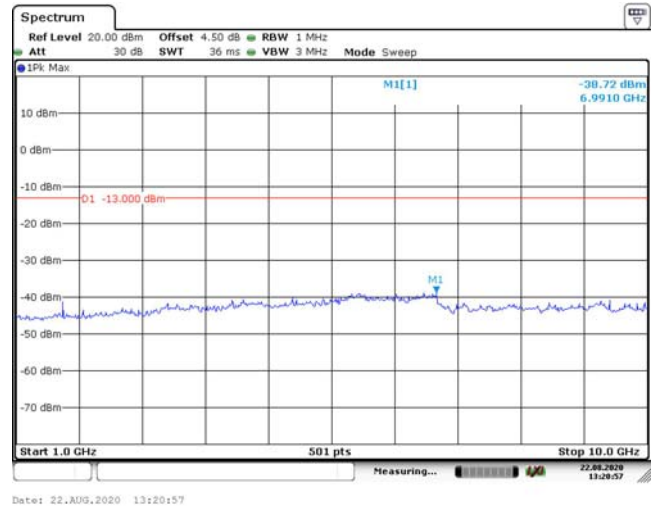
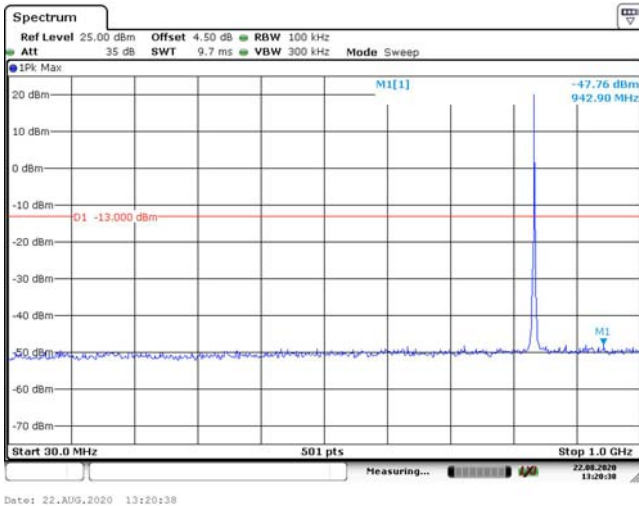
Date: 28.AUG.2020 19:43:54

LTE Band 5:

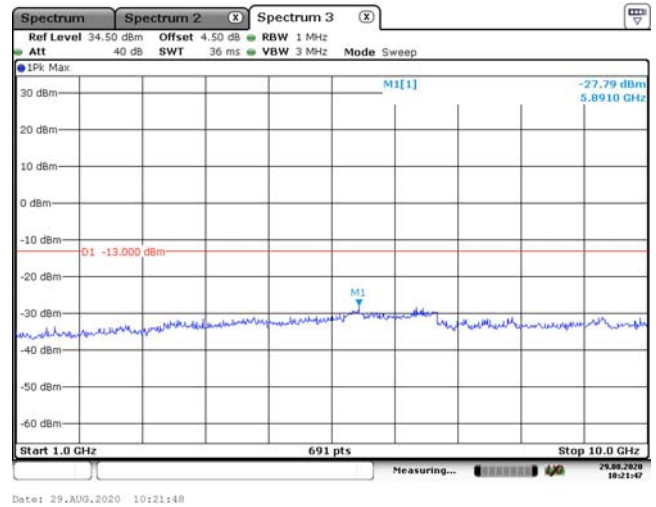
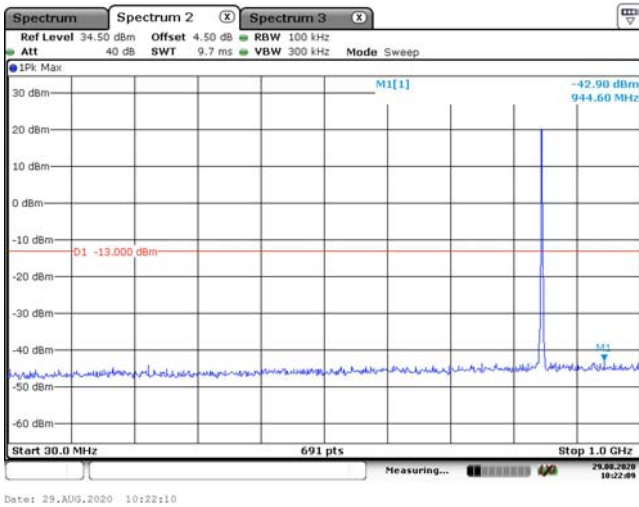
1.4M, QPSK, Low Channel



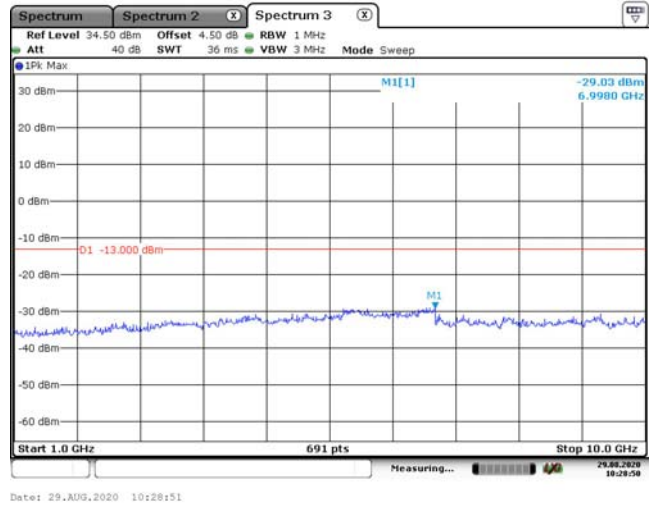
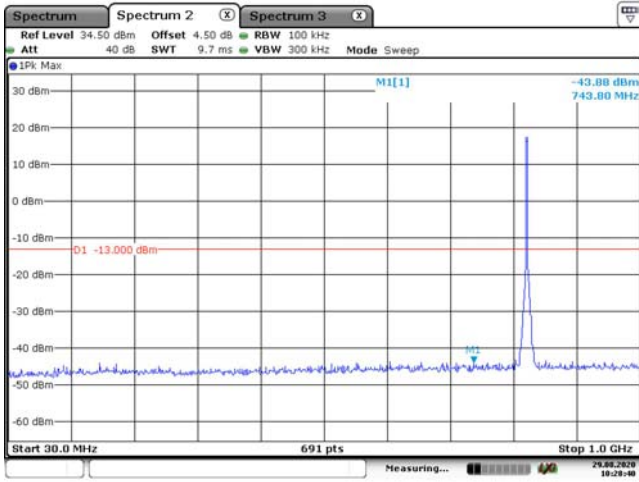
1.4M, QPSK, Middle Channel



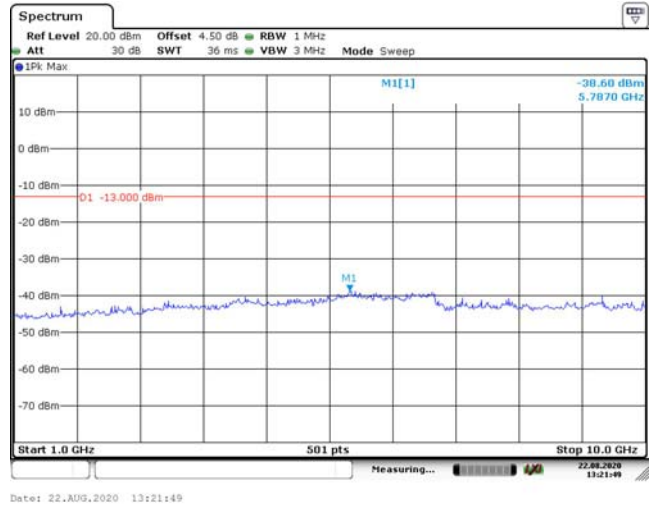
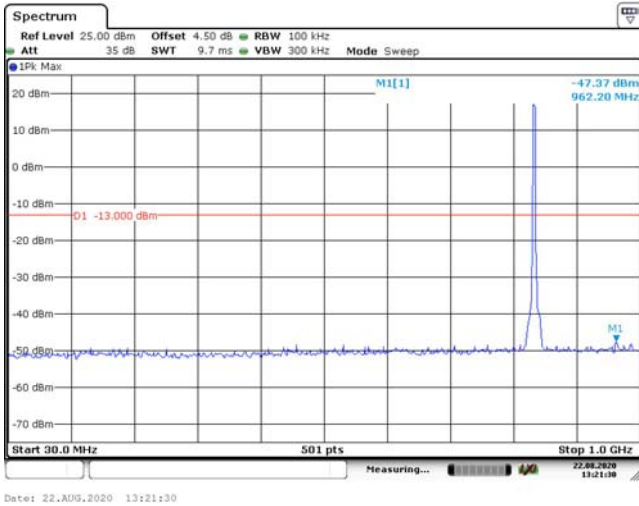
1.4M, QPSK, High Channel



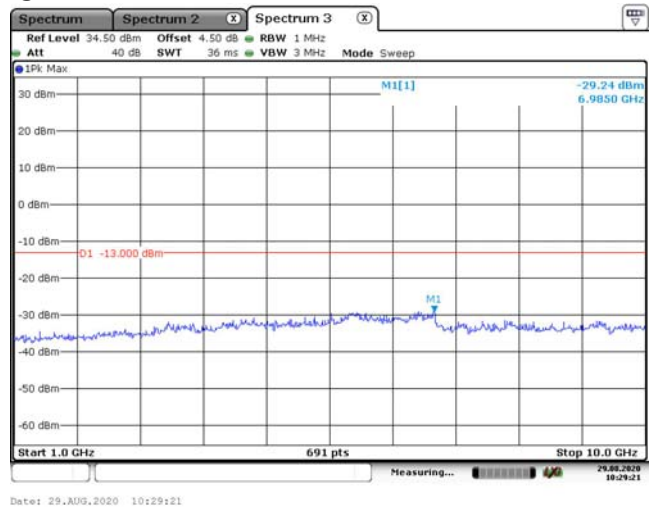
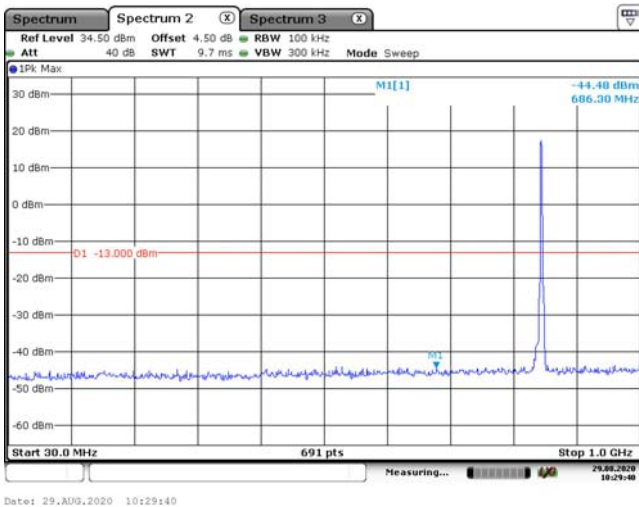
3M, QPSK, Low Channel



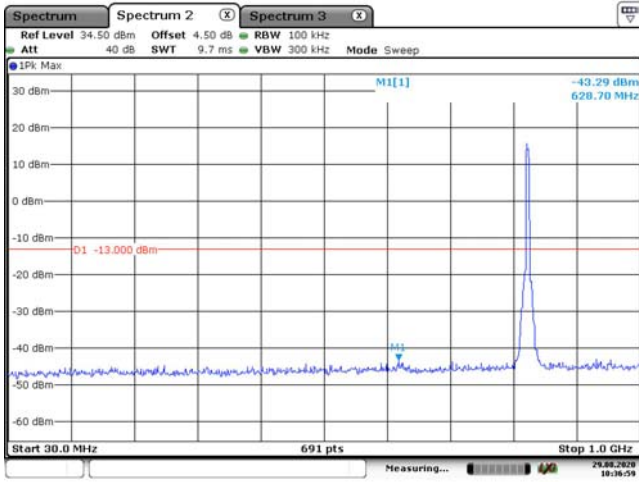
3M, QPSK, Middle Channel



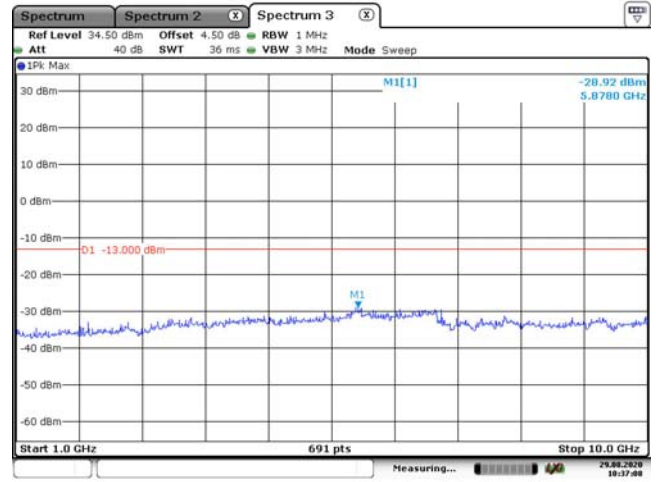
3M, QPSK, High Channel



5M, QPSK, Low Channel

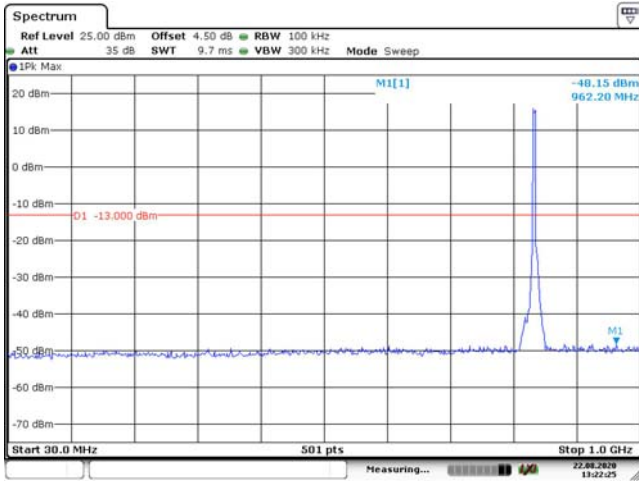


Date: 29.AUG.2020 10:37:00

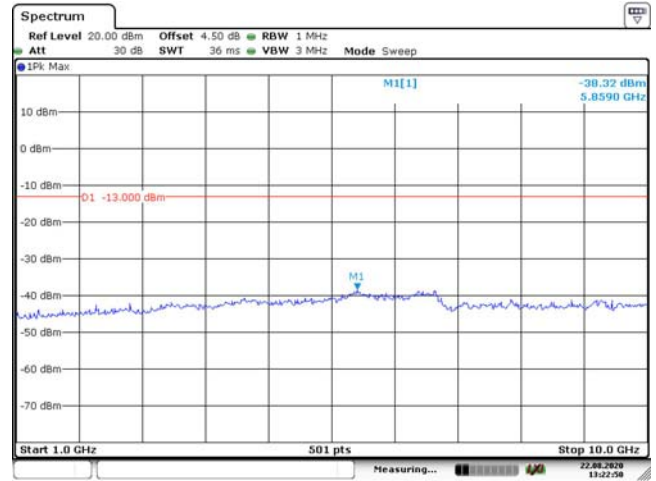


Date: 29.AUG.2020 10:37:09

5M, QPSK, Middle Channel

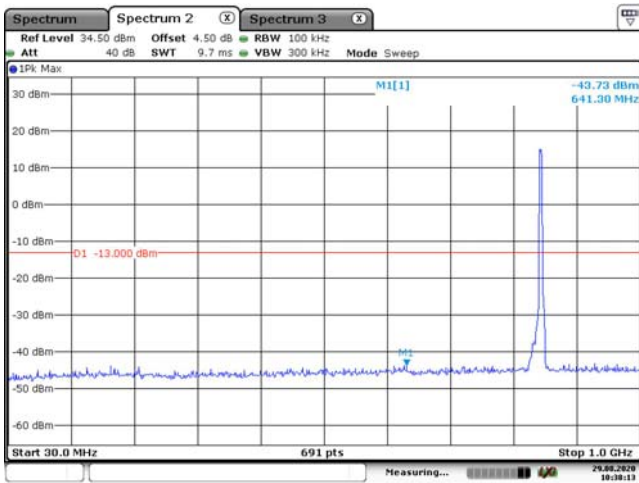


Date: 22.AUG.2020 13:22:25

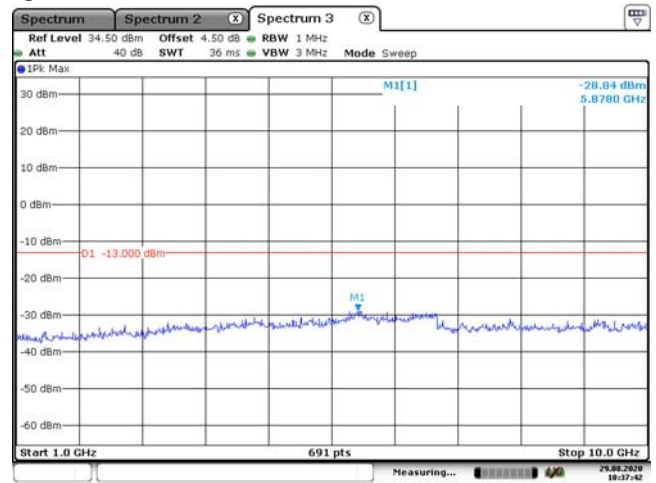


Date: 22.AUG.2020 13:22:50

5M, QPSK, High Channel

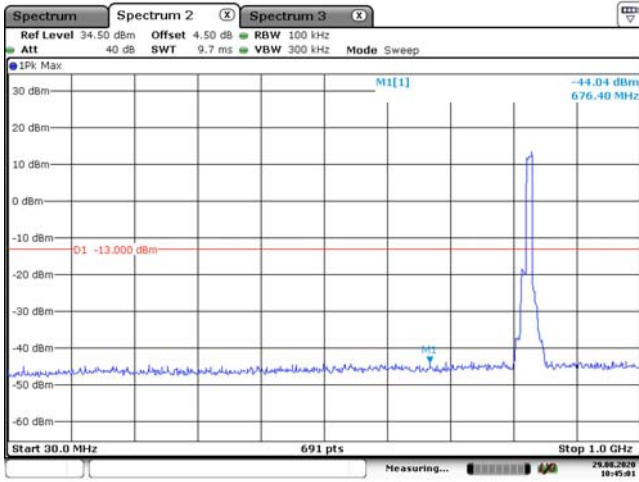


Date: 29.AUG.2020 10:38:13

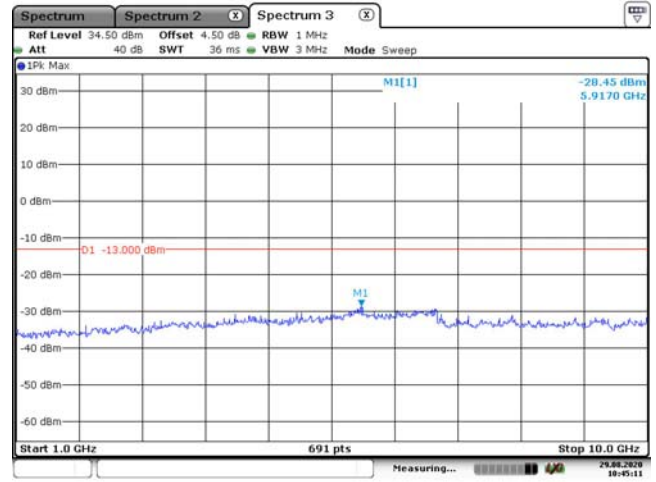


Date: 29.AUG.2020 10:37:43

10M, QPSK, Low Channel

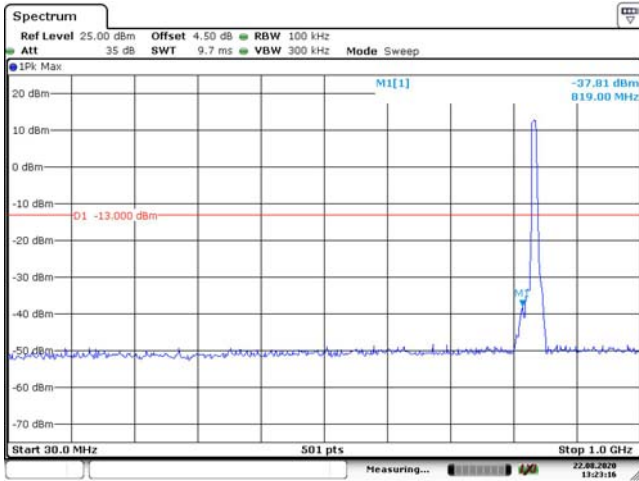


Date: 29.AUG.2020 10:45:01

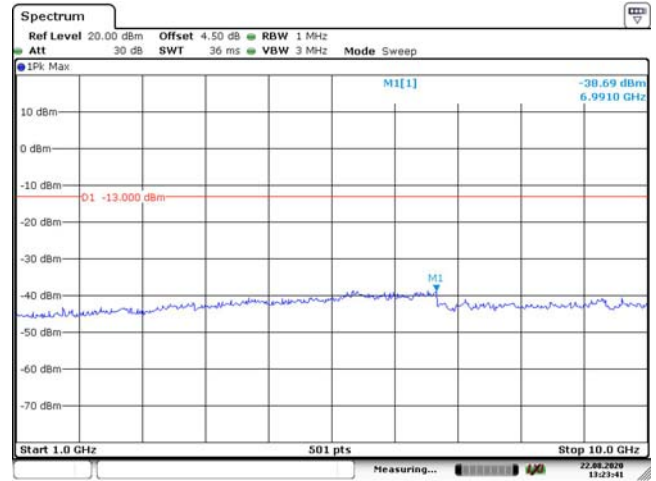


Date: 29.AUG.2020 10:45:12

10M, QPSK, Middle Channel

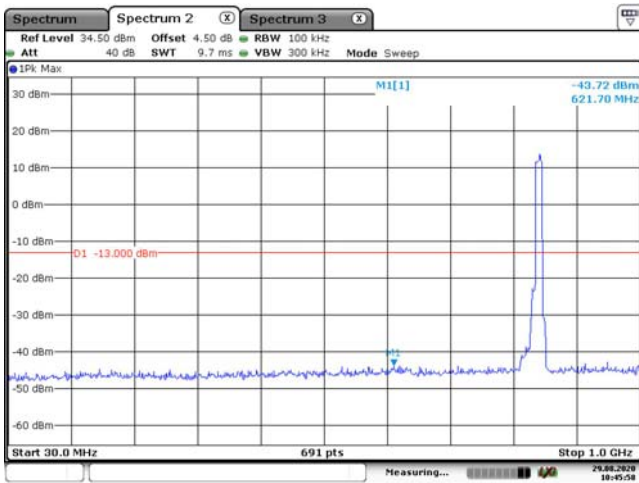


Date: 22.AUG.2020 13:23:16

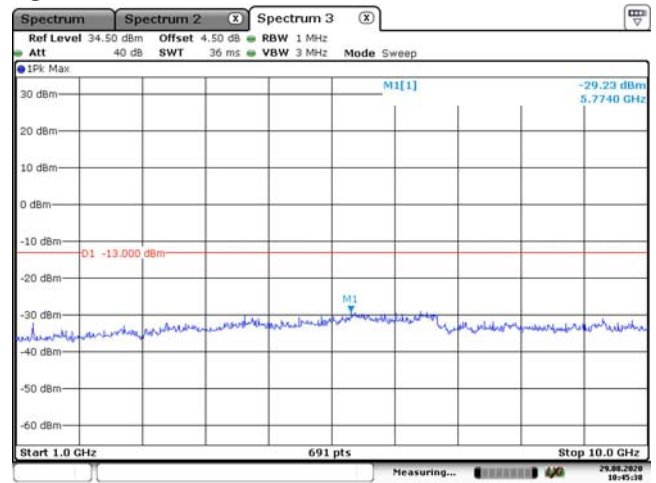


Date: 22.AUG.2020 13:23:41

10M, QPSK, High Channel



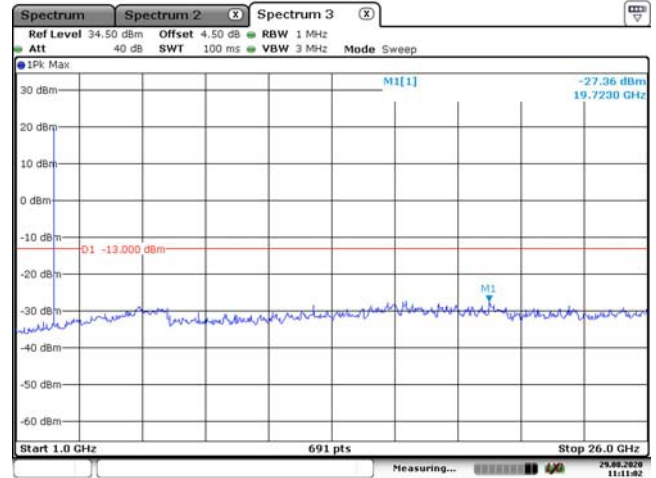
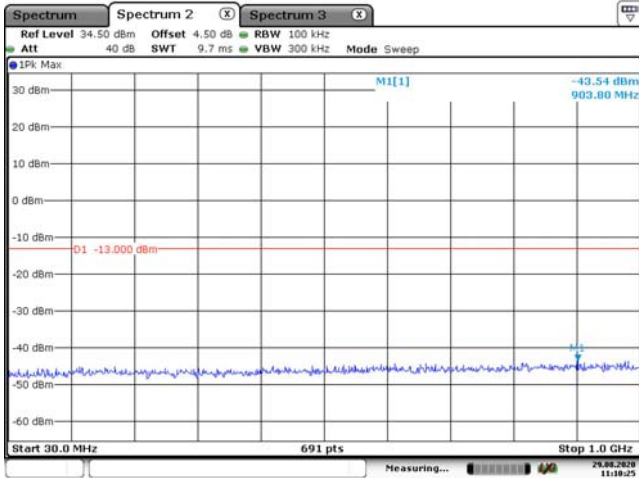
Date: 29.AUG.2020 10:45:59



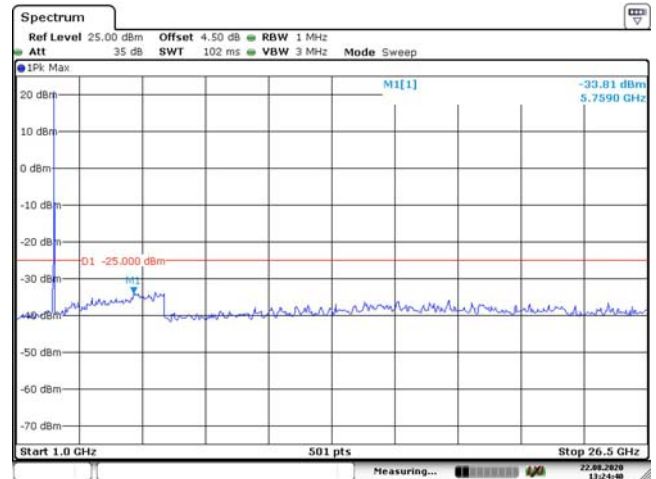
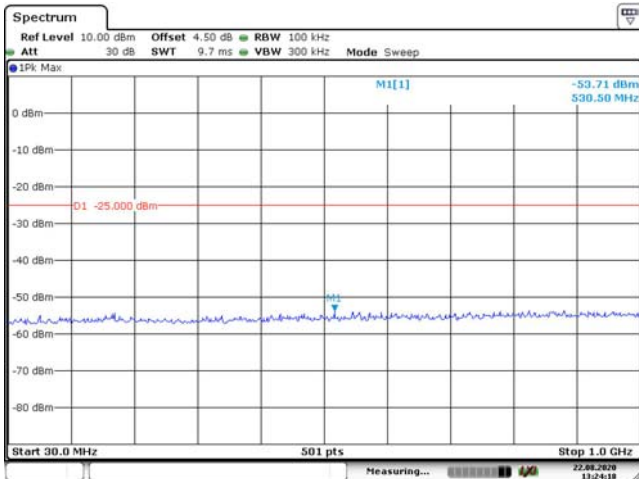
Date: 29.AUG.2020 10:45:39

LTE Band 7(All emission under Limit -25dBm):

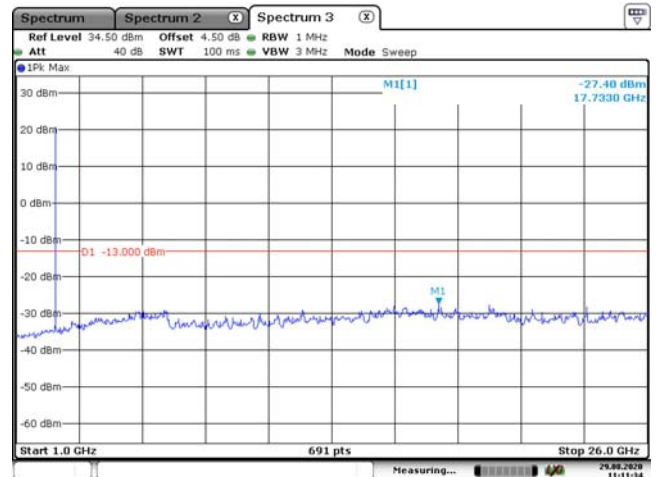
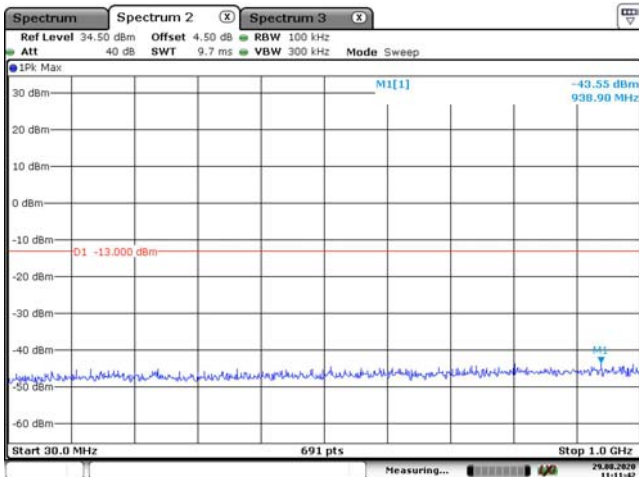
5M, QPSK, Low Channel



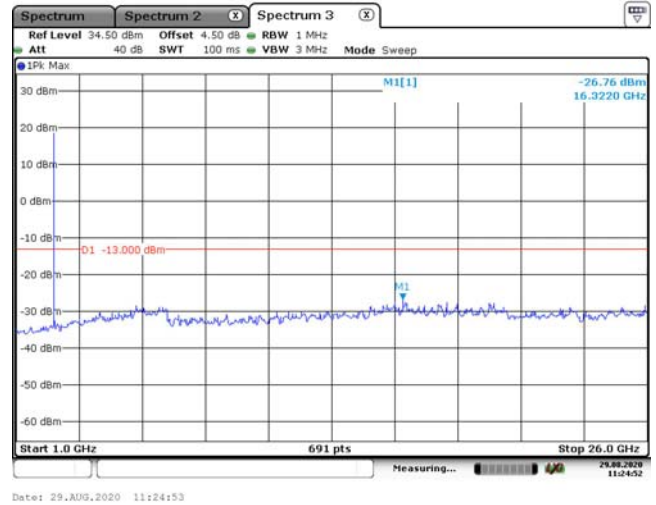
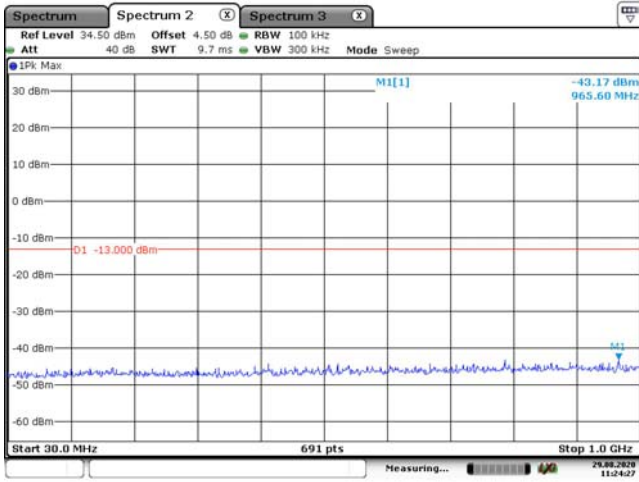
5M, QPSK, Middle Channel



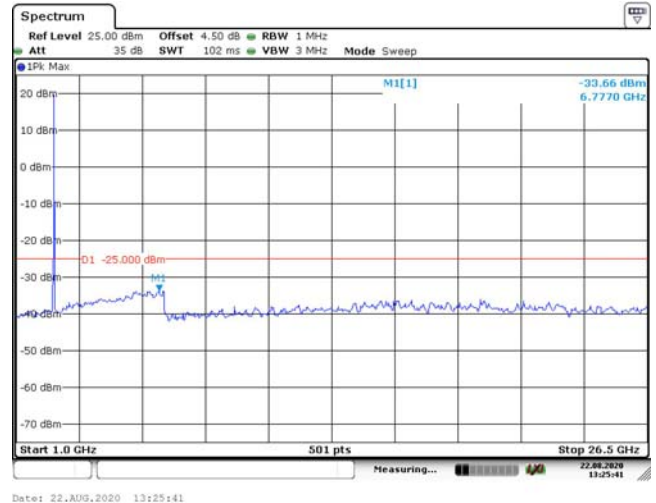
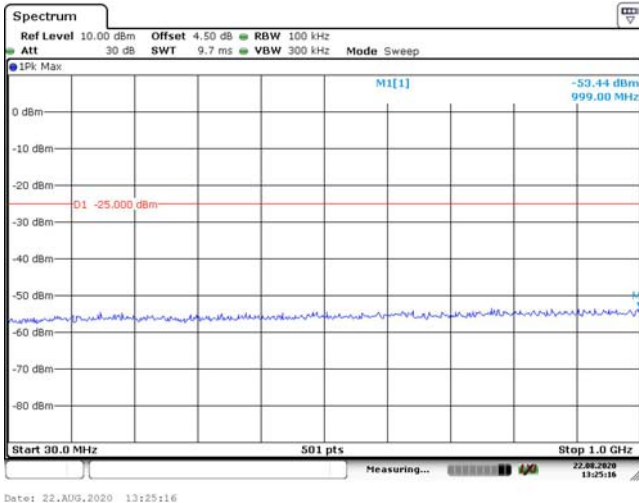
5M, QPSK, High Channel



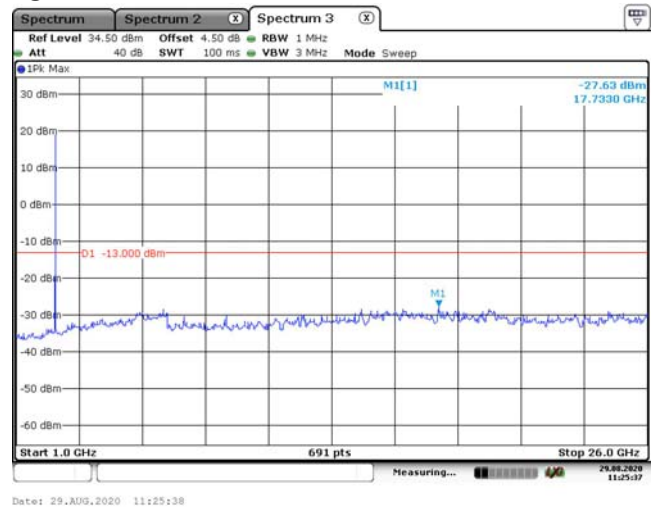
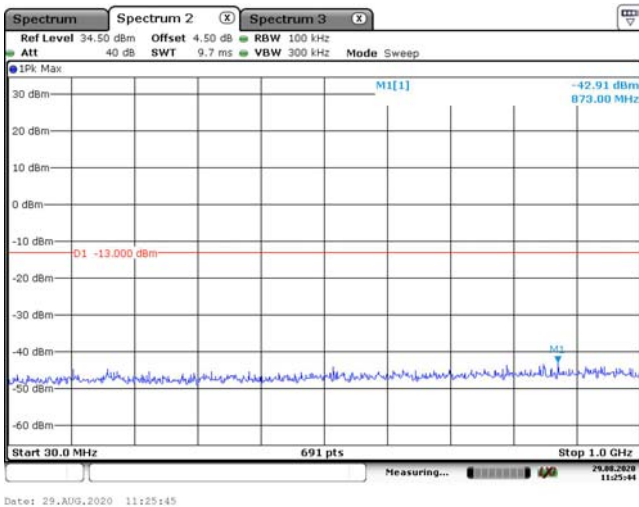
10M, QPSK, Low Channel



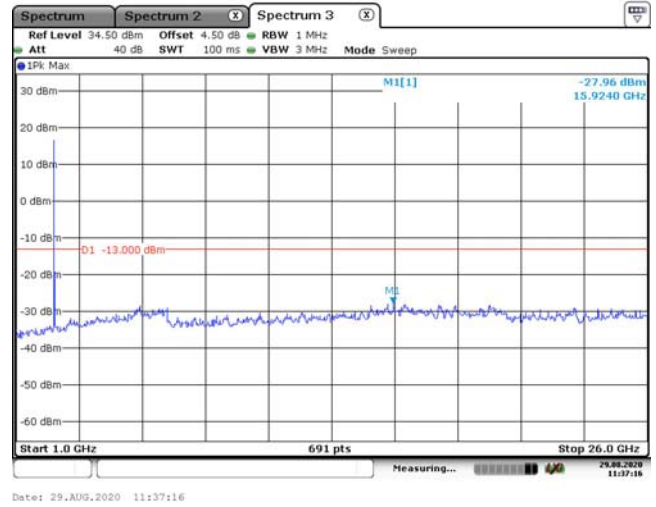
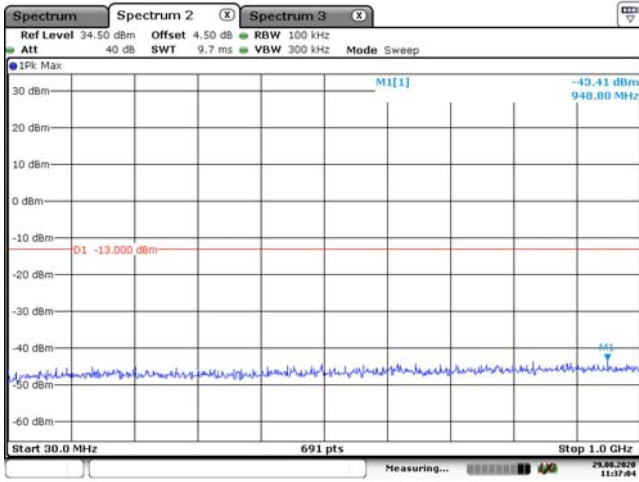
10M, QPSK, Middle Channel



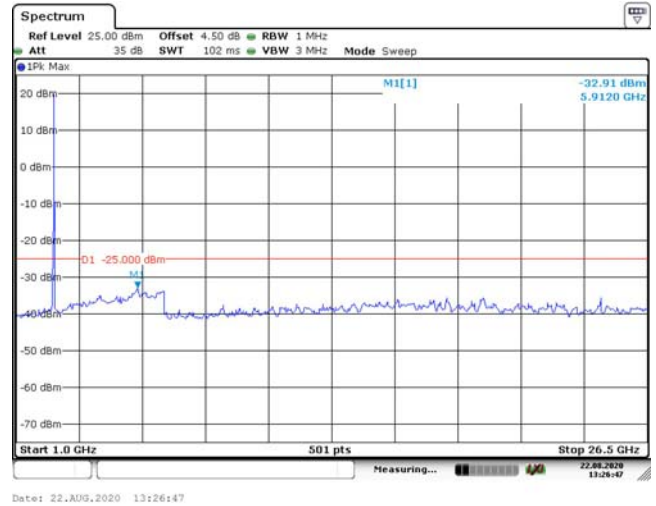
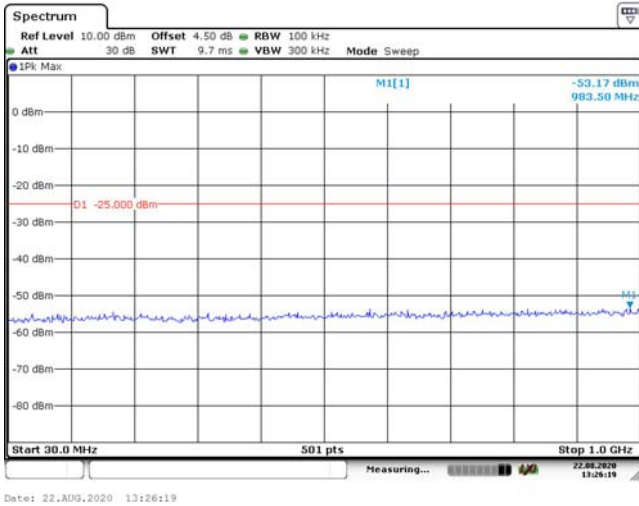
10M, QPSK, High Channel



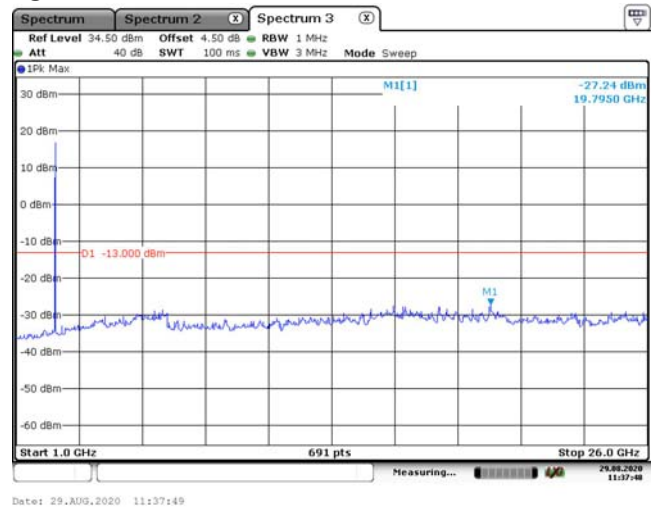
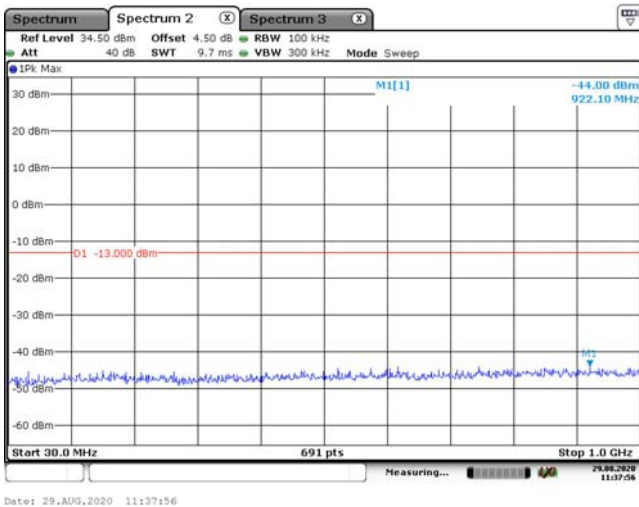
15M, QPSK, Low Channel



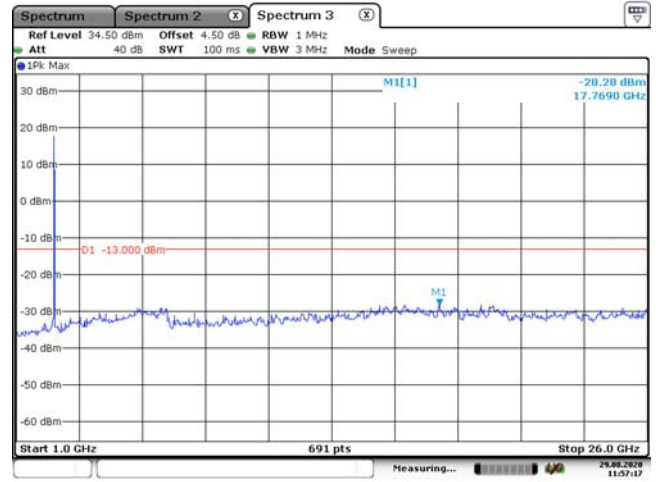
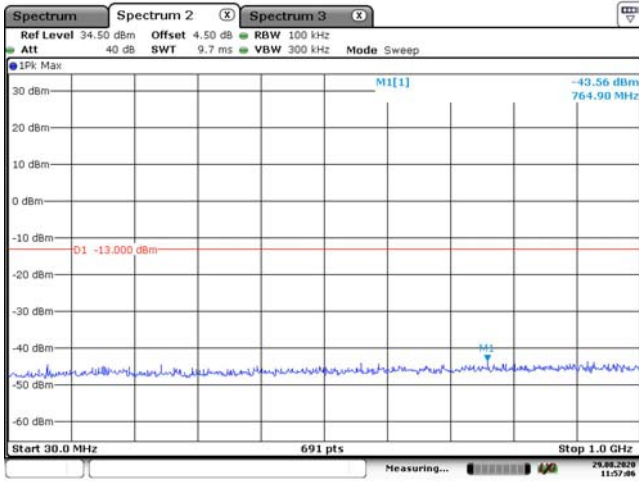
15M, QPSK, Middle Channel



15M, QPSK, High Channel



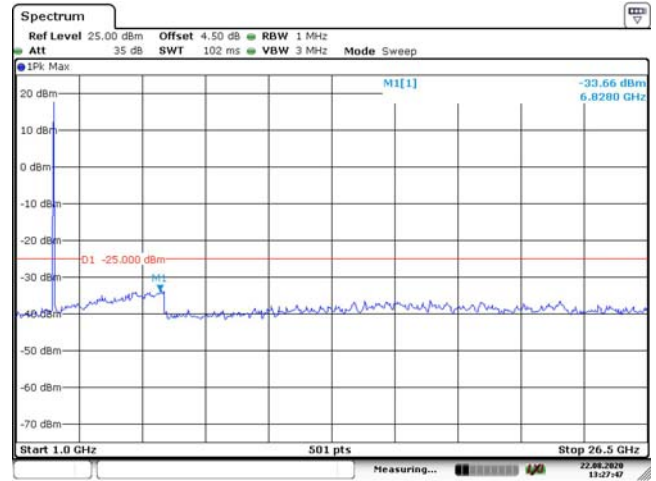
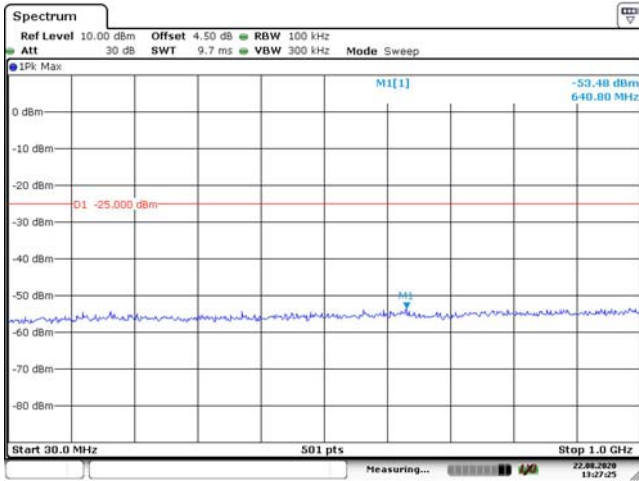
20M, QPSK, Low Channel



Date: 29.AUG.2020 11:57:07

Date: 29.AUG.2020 11:57:18

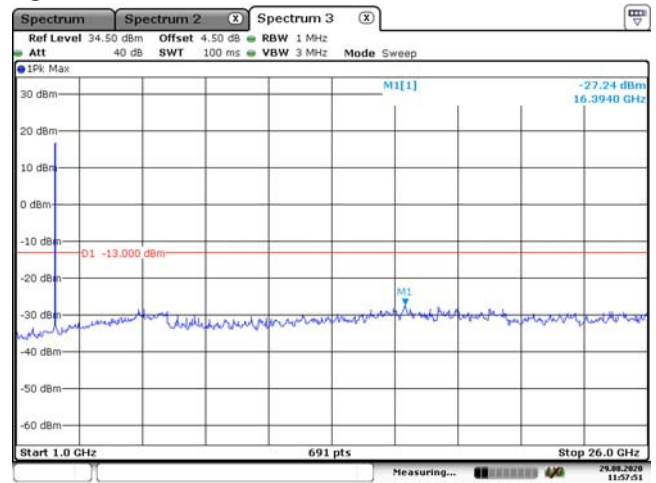
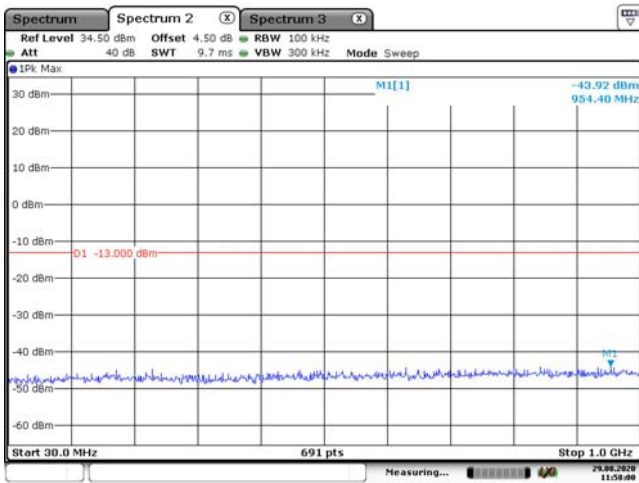
20M, QPSK, Middle Channel



Date: 22.AUG.2020 13:27:25

Date: 22.AUG.2020 13:27:47

20M, QPSK, High Channel

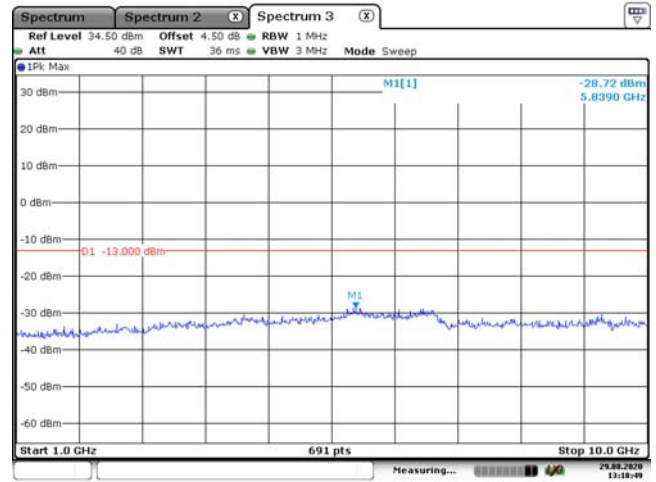
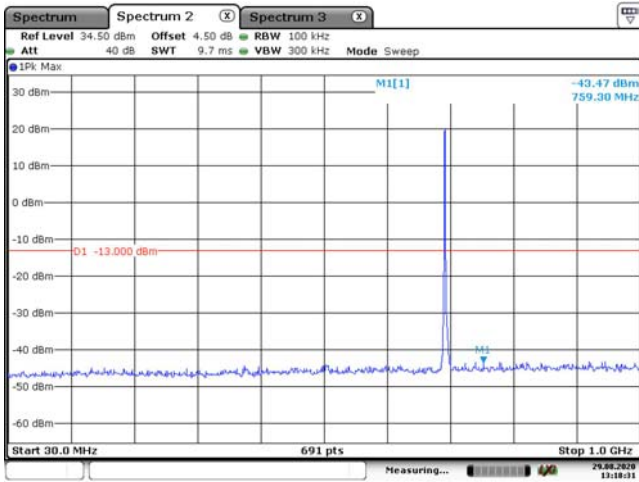


Date: 29.AUG.2020 11:58:00

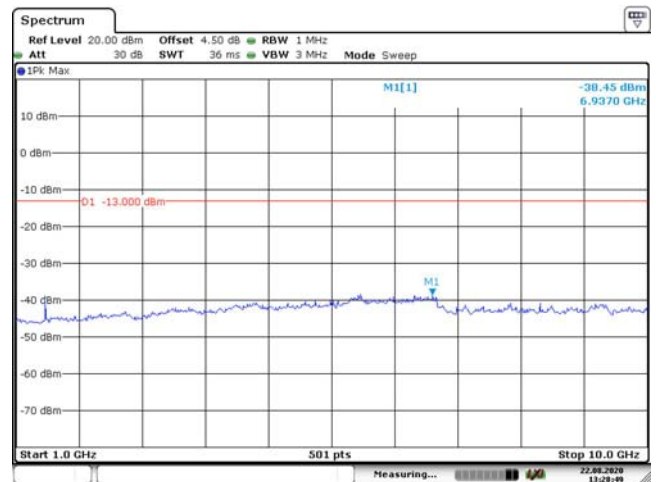
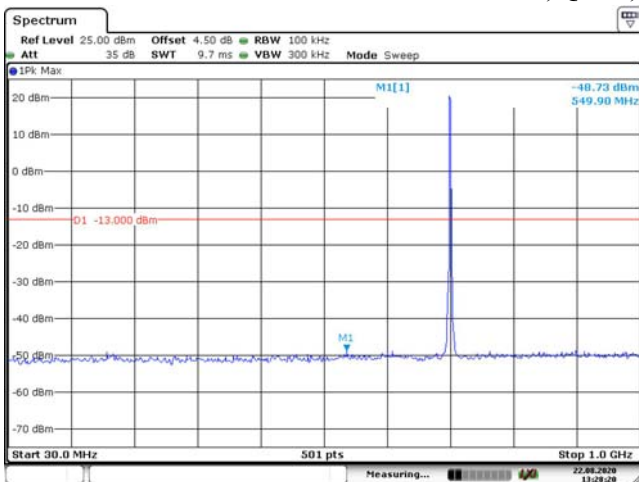
Date: 29.AUG.2020 11:57:51

LTE Band 12:

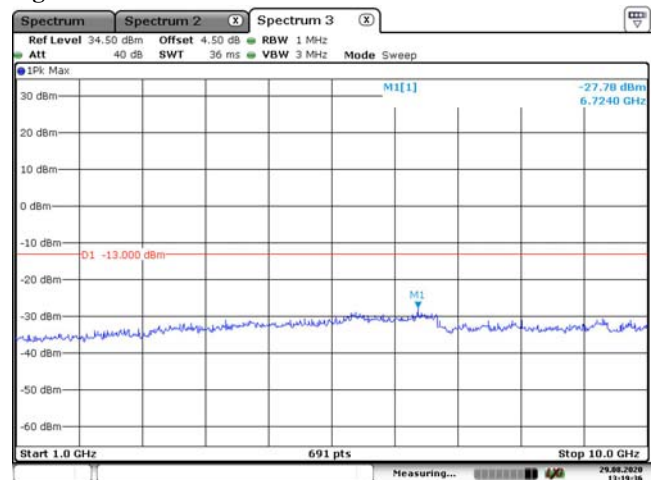
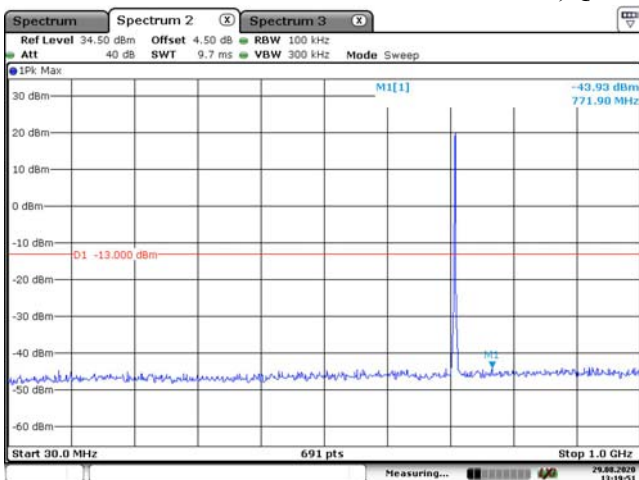
1.4M, QPSK, Low Channel



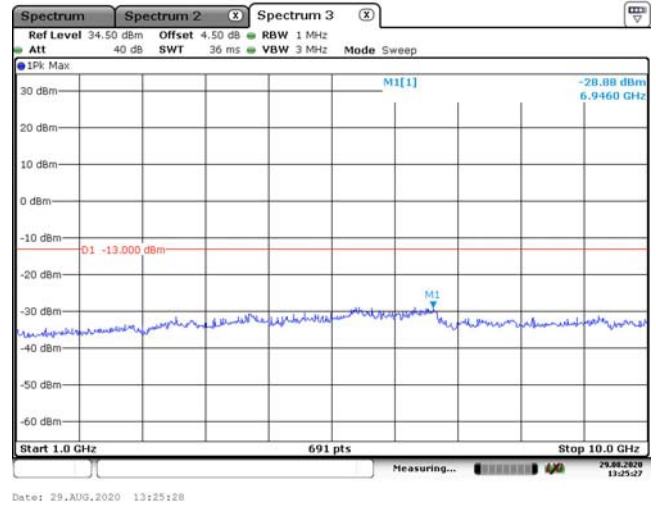
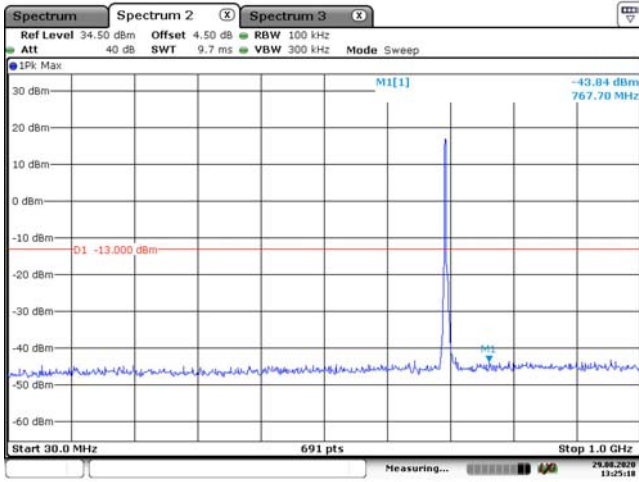
1.4M, QPSK, Middle Channel



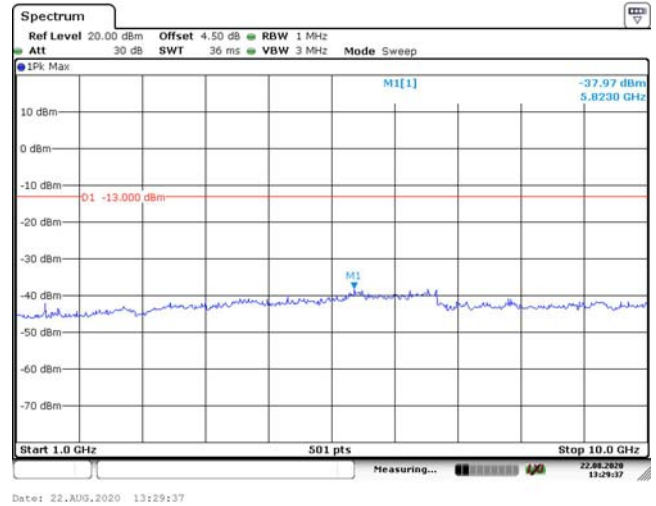
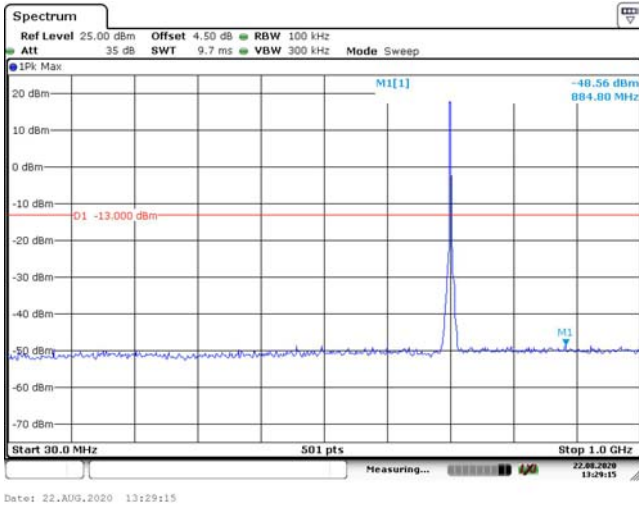
1.4M, QPSK, High Channel



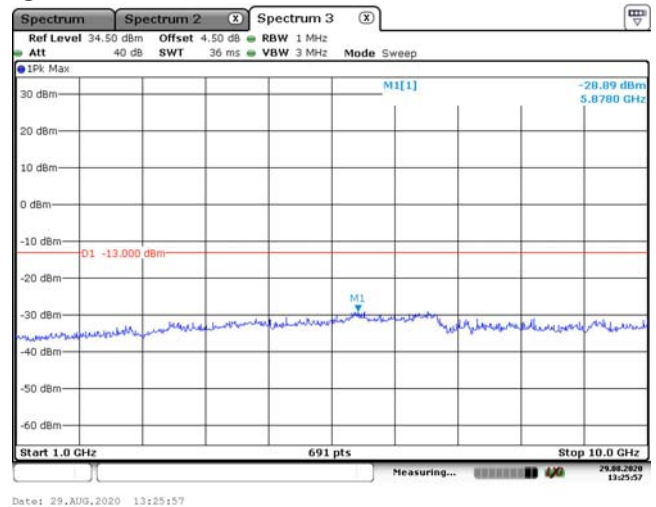
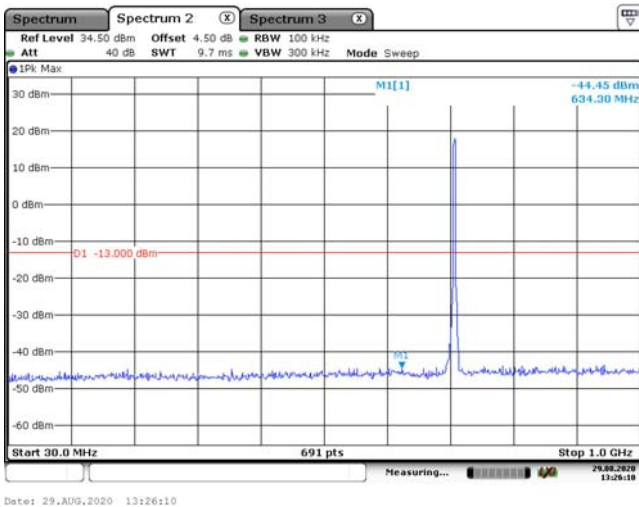
3M, QPSK, Low Channel



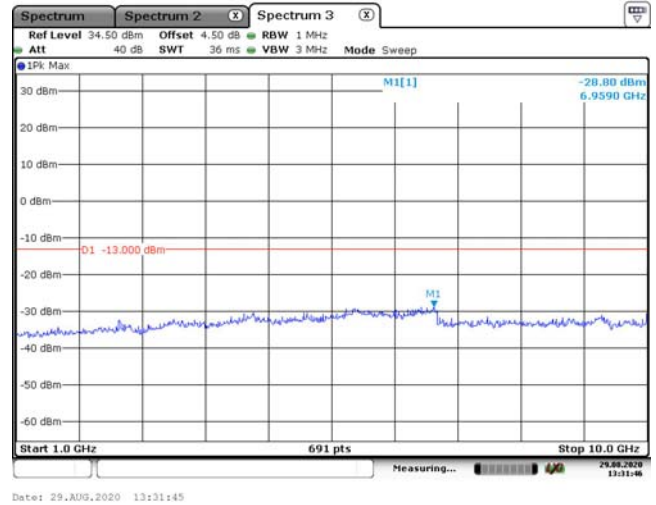
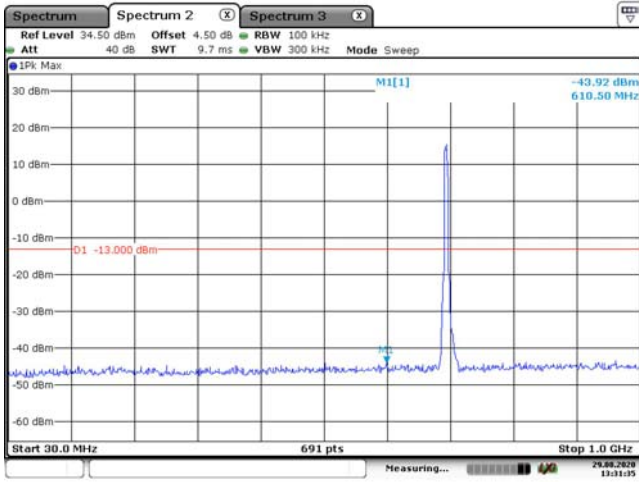
3M, QPSK, Middle Channel



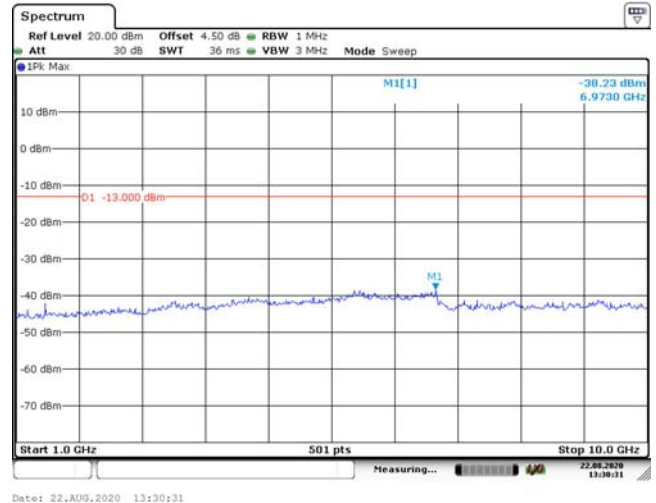
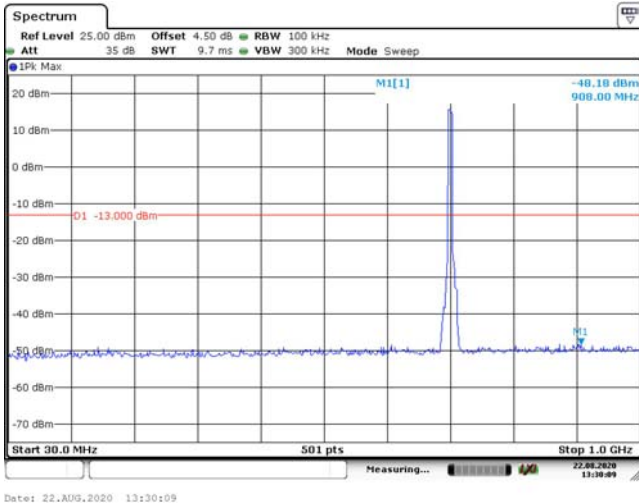
3M, QPSK, High Channel



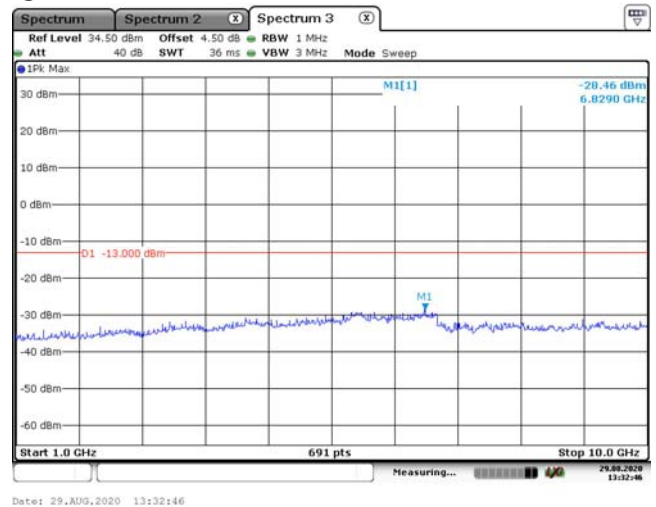
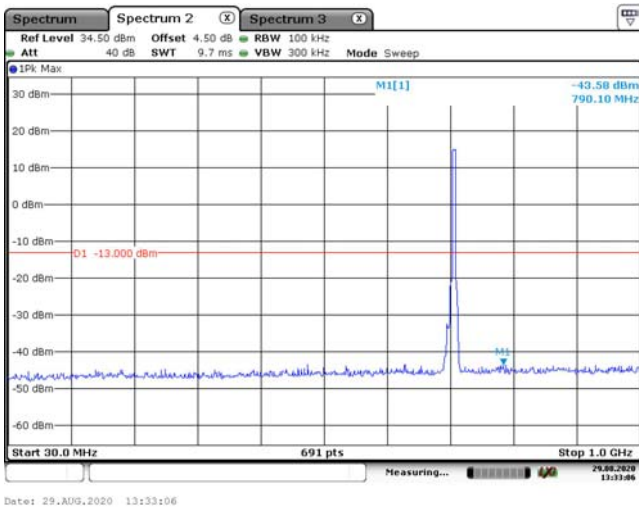
5M, QPSK, Low Channel



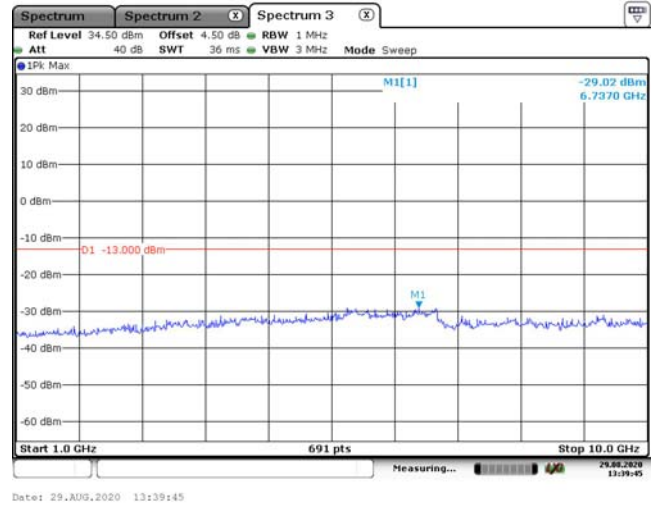
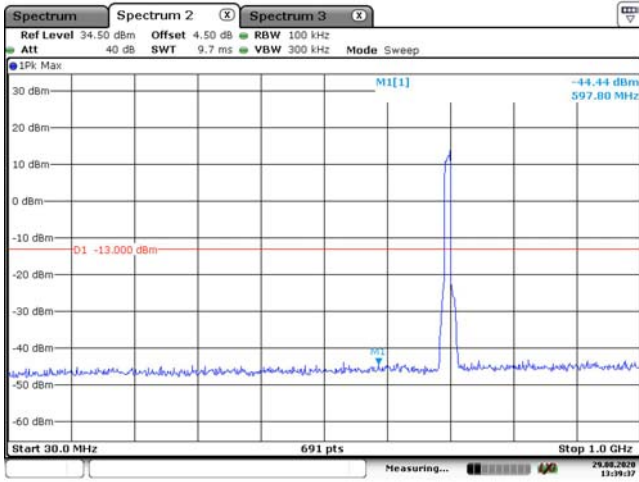
5M, QPSK, Middle Channel



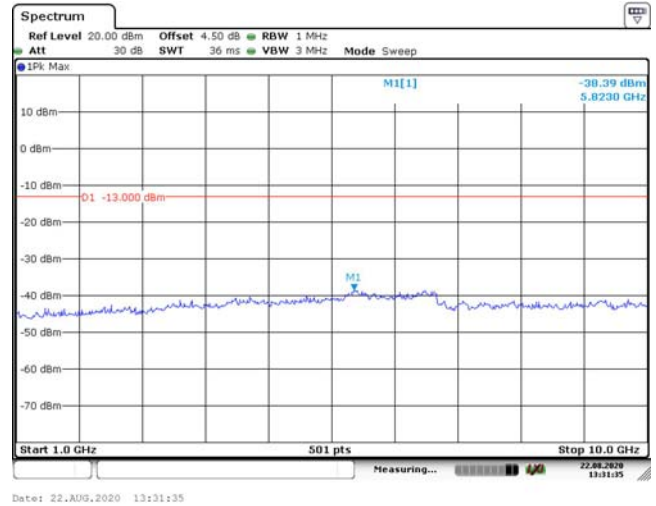
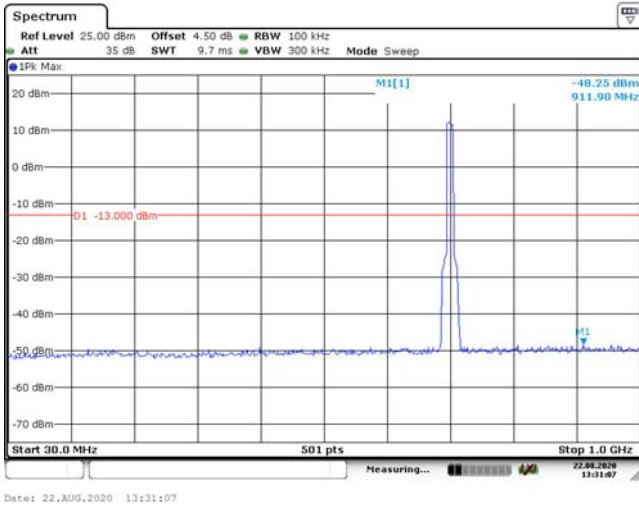
5M, QPSK, High Channel



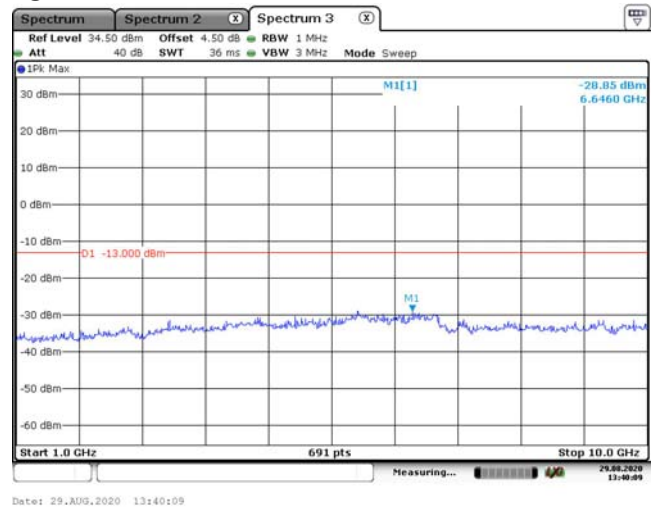
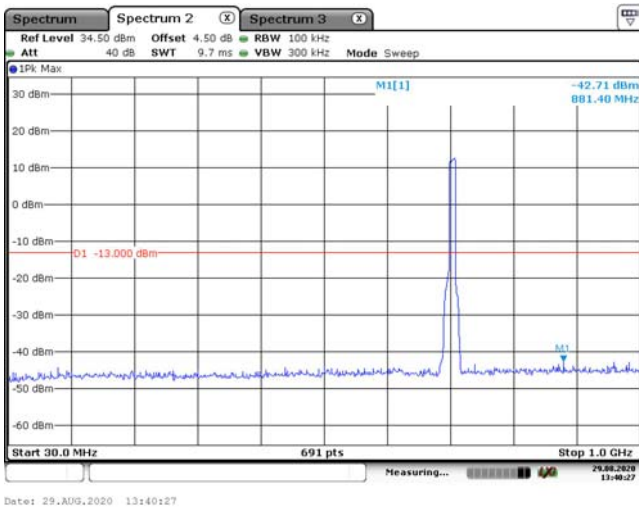
10M, QPSK, Low Channel



10M, QPSK, Middle Channel

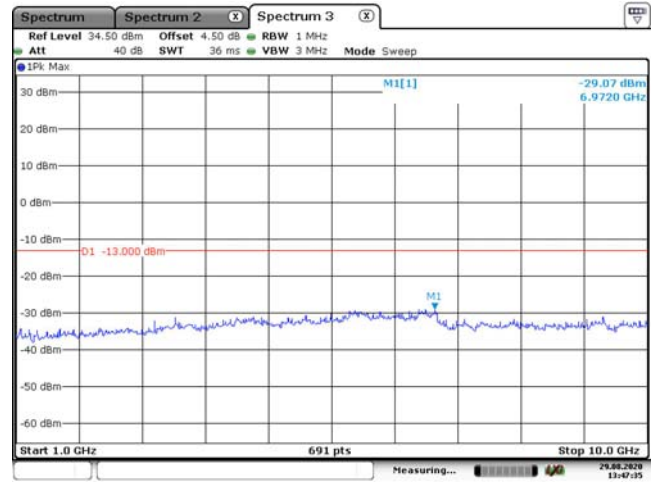
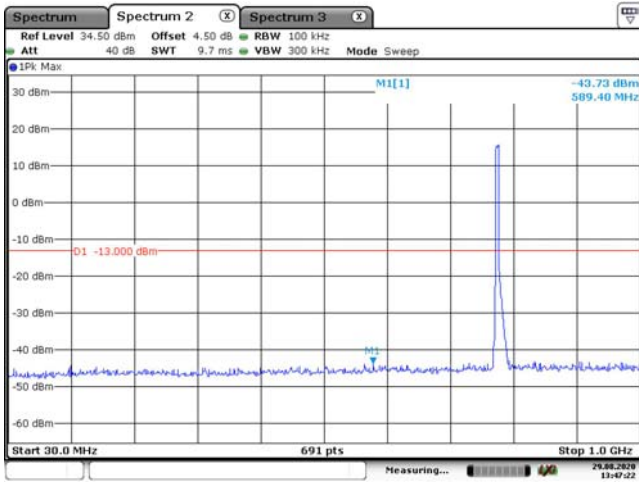


10M, QPSK, High Channel

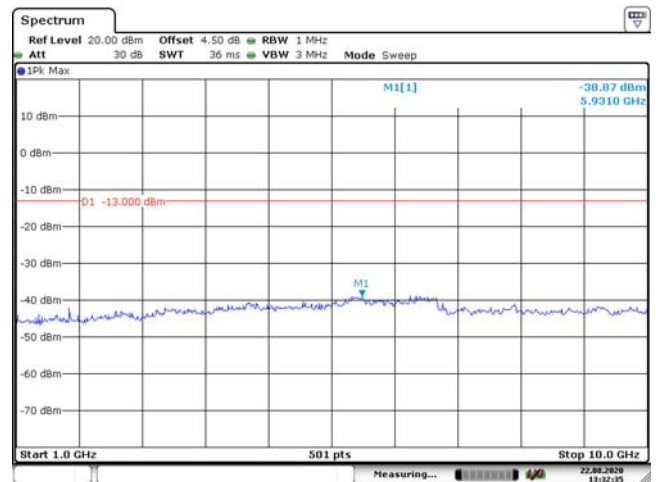
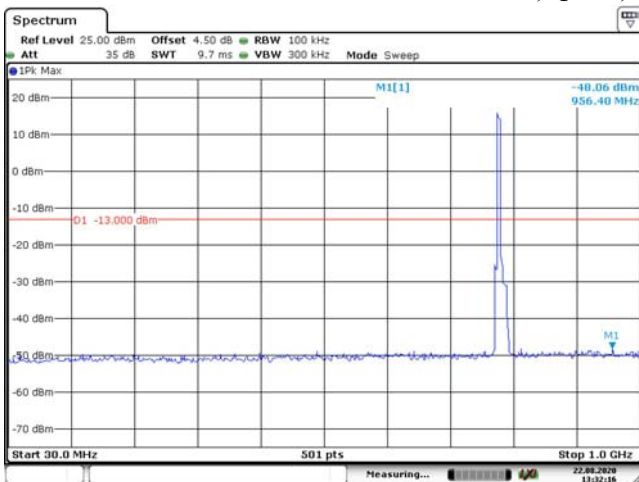


LTE Band 13:

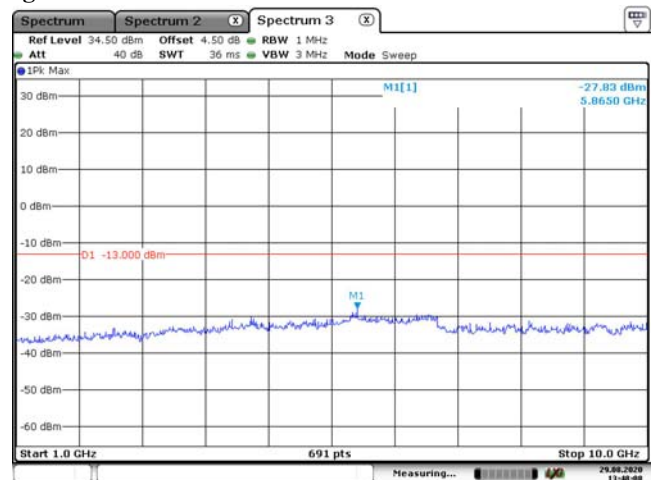
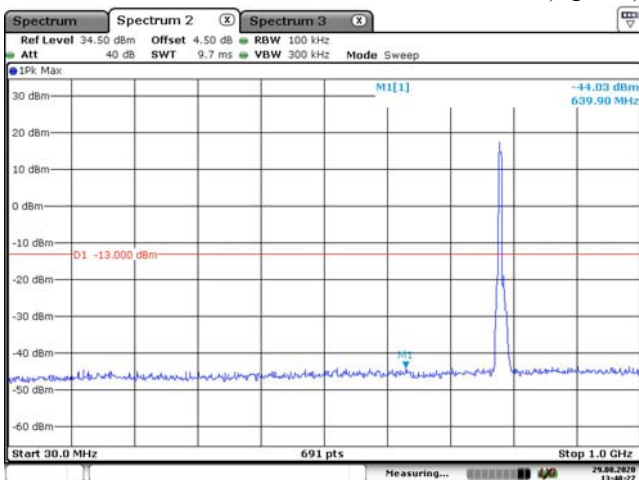
5M, QPSK, Low Channel



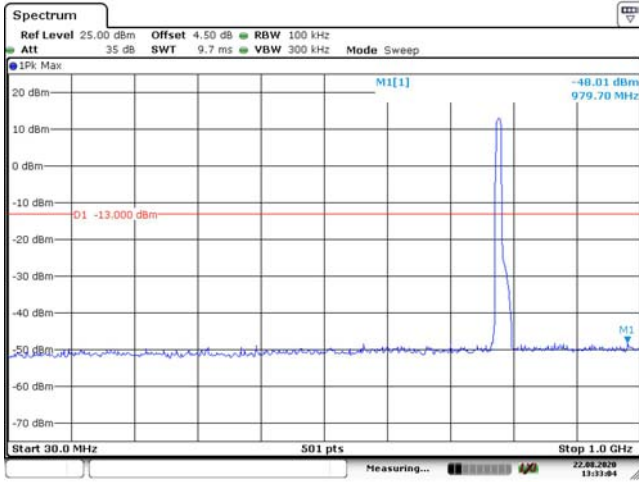
5M, QPSK, Middle Channel



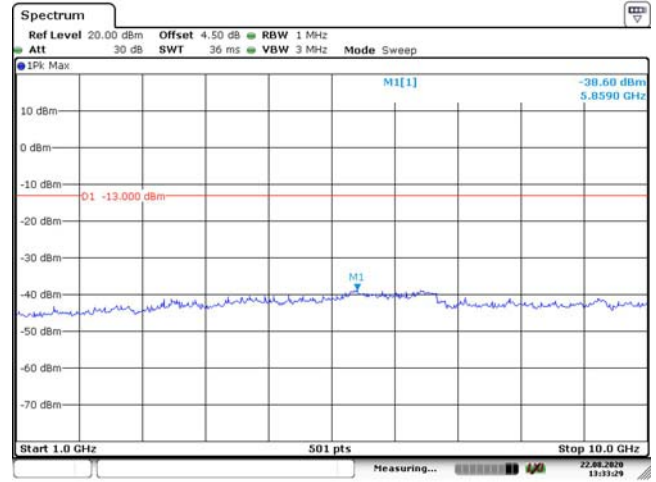
5M, QPSK, High Channel



10M, QPSK, Middle Channel



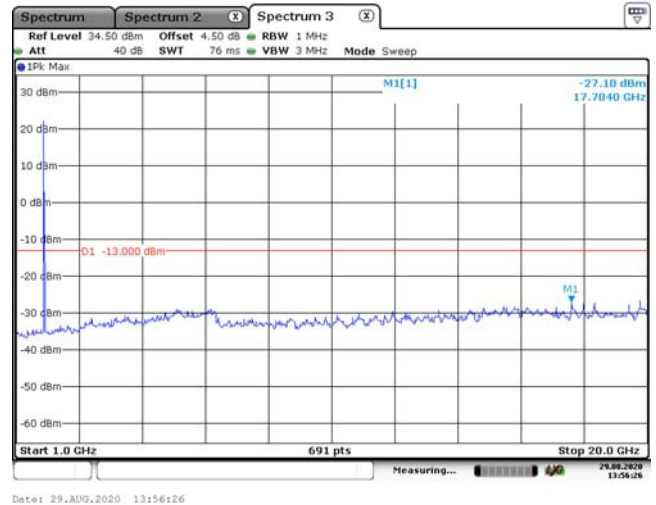
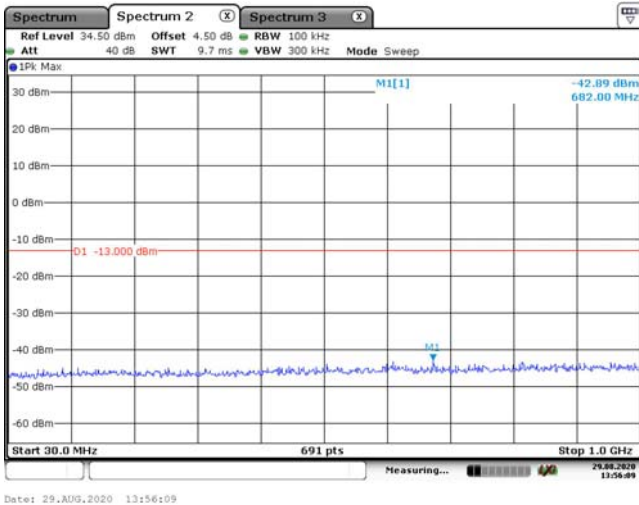
Date: 22.AUG.2020 13:33:04



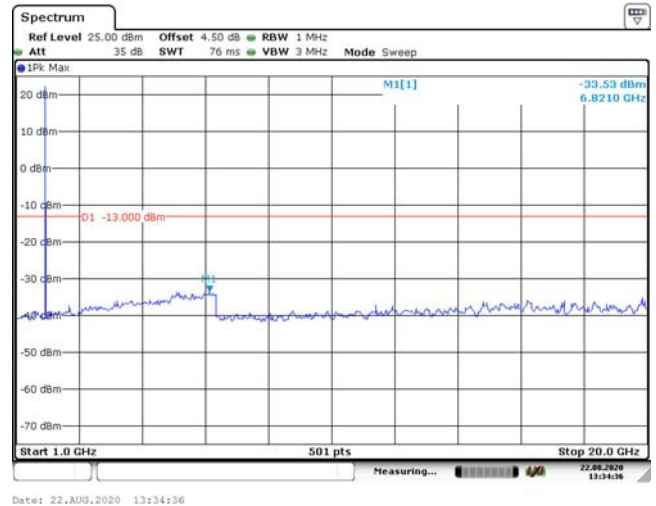
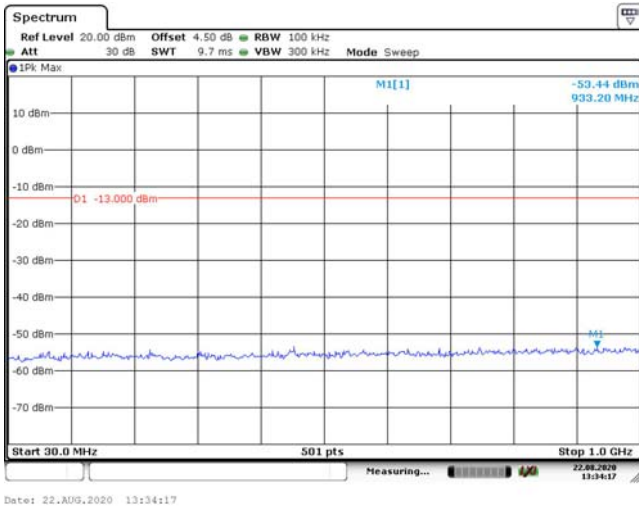
Date: 22.AUG.2020 13:33:29

LTE Band 25:

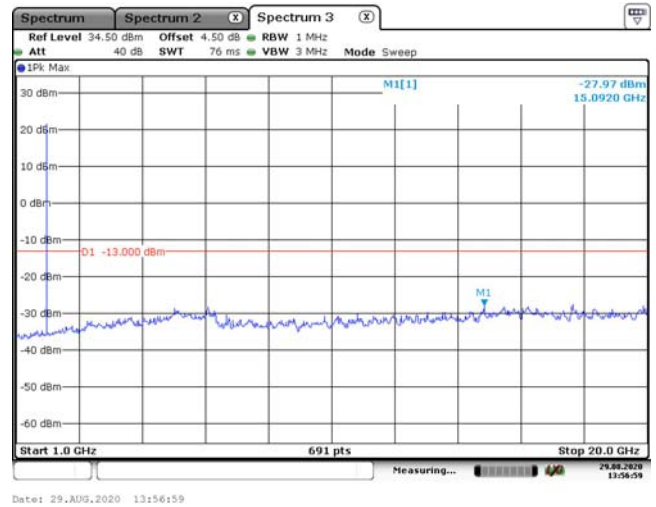
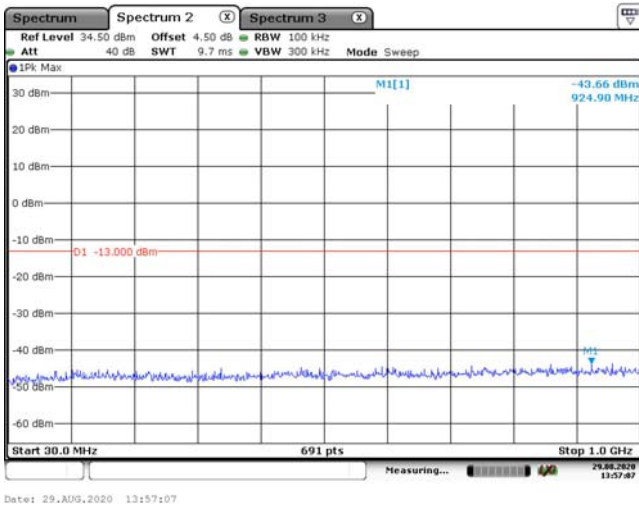
1.4M, QPSK, Low Channel



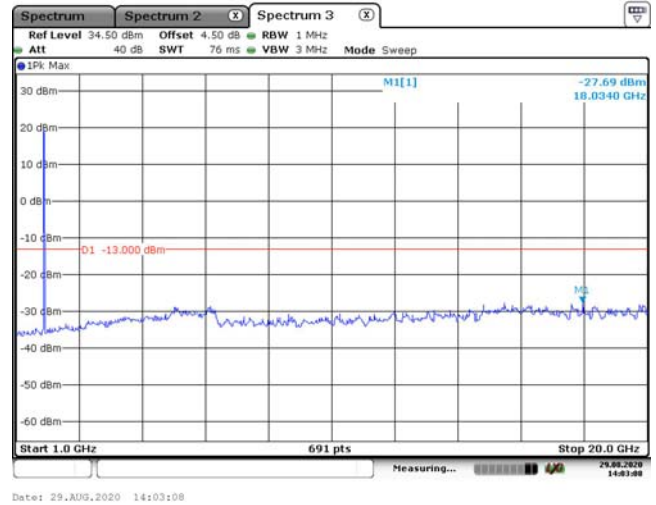
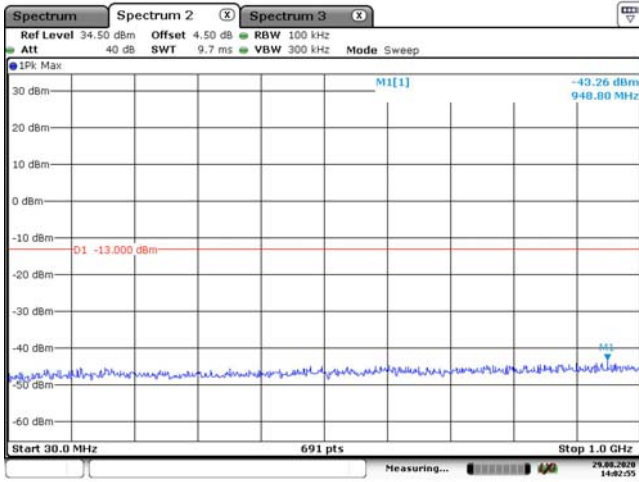
1.4M, QPSK, Middle Channel



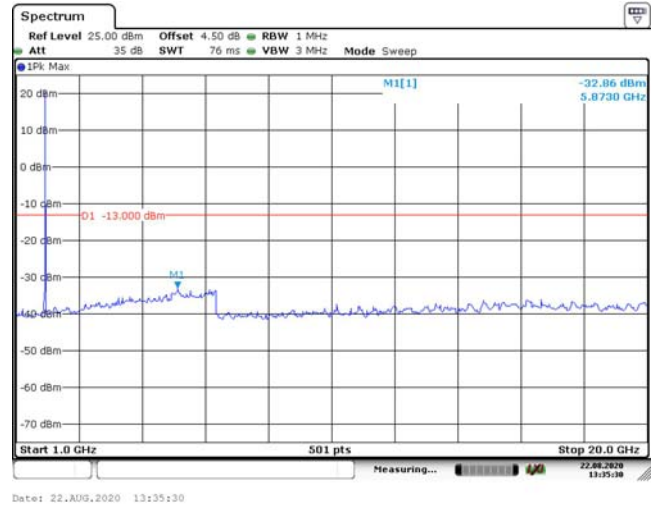
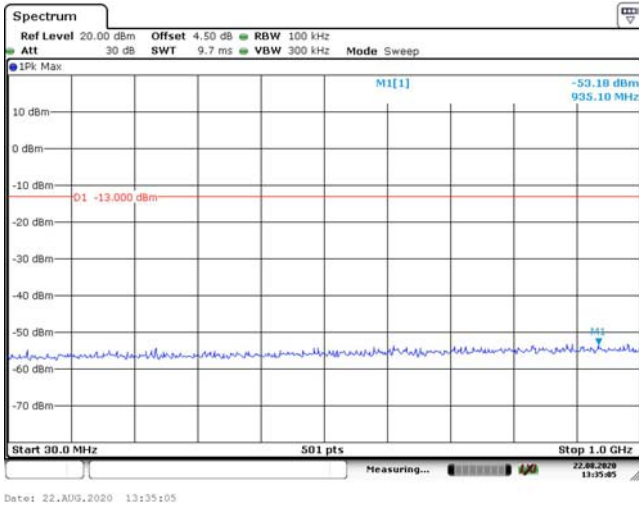
1.4M, QPSK, High Channel



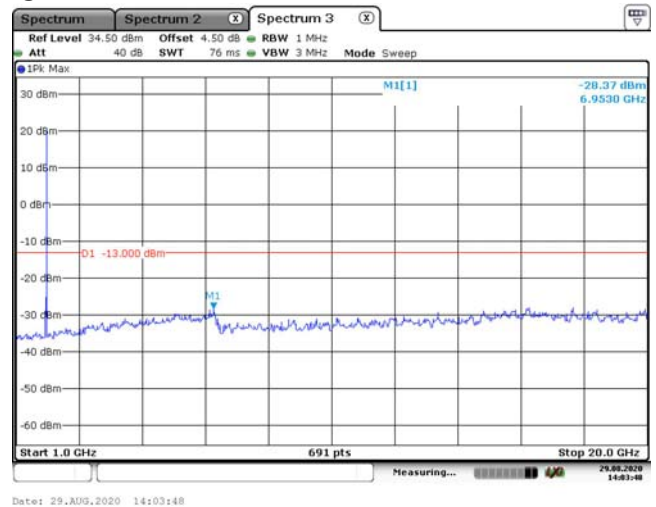
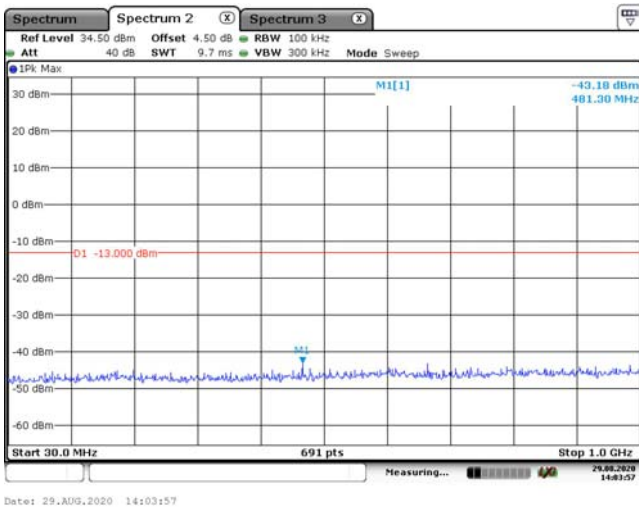
3M, QPSK, Low Channel



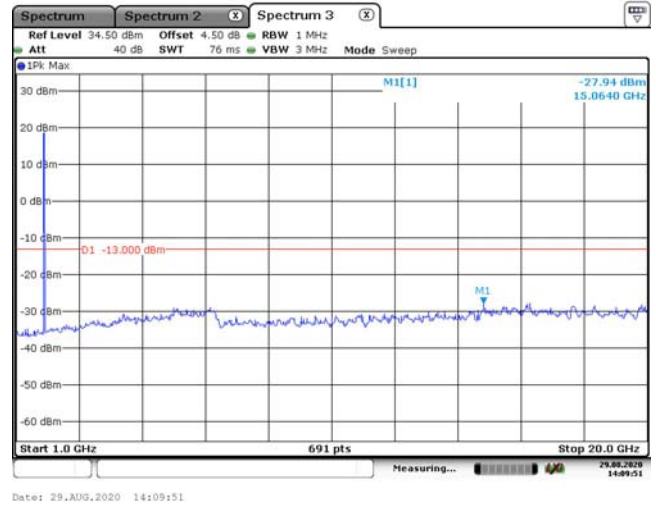
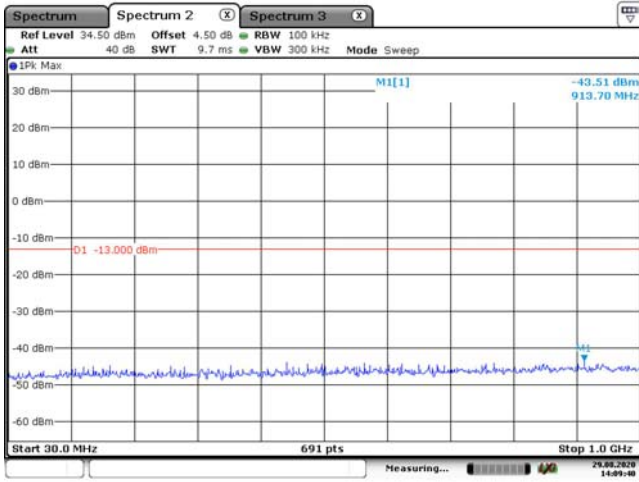
3M, QPSK, Middle Channel



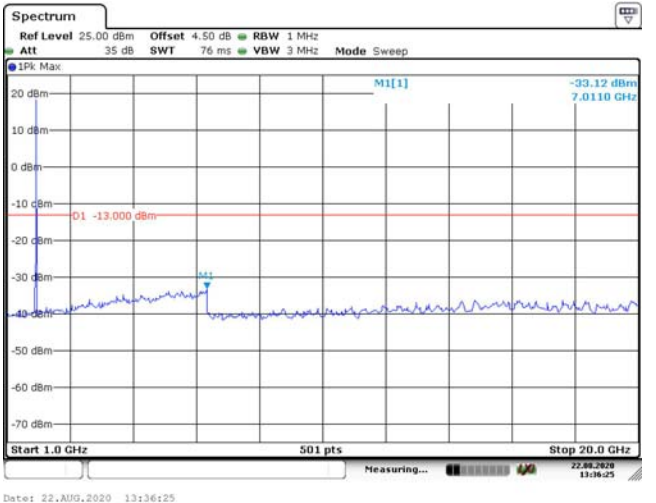
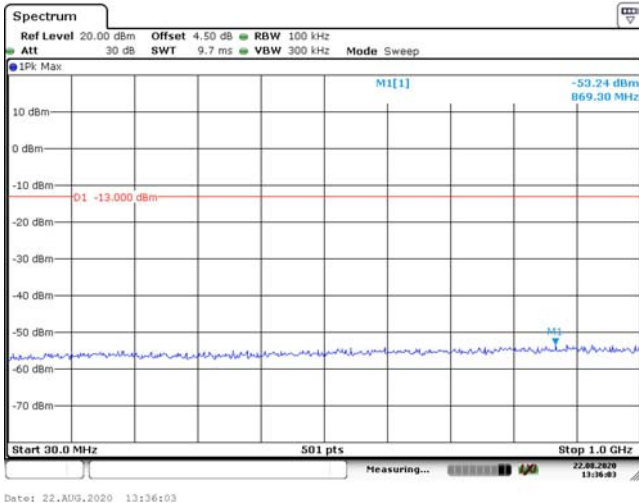
3M, QPSK, High Channel



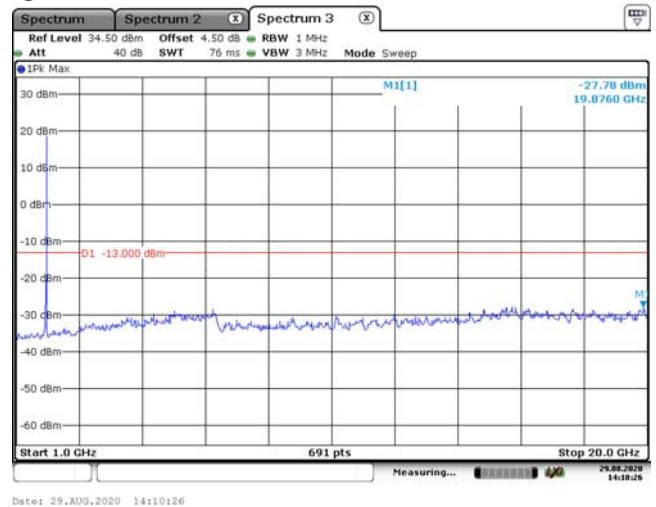
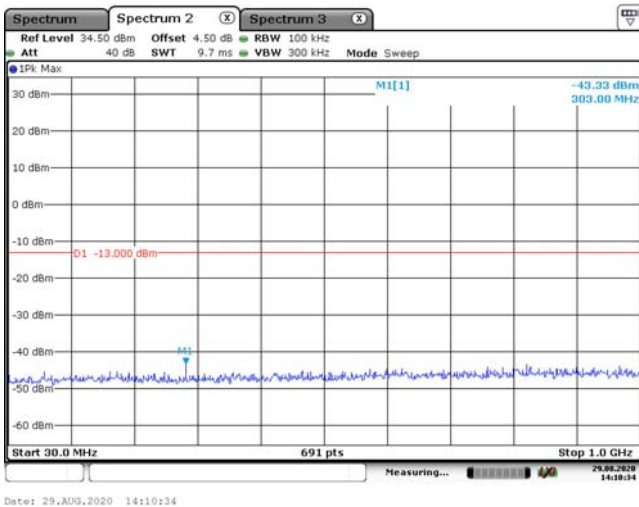
5M, QPSK, Low Channel



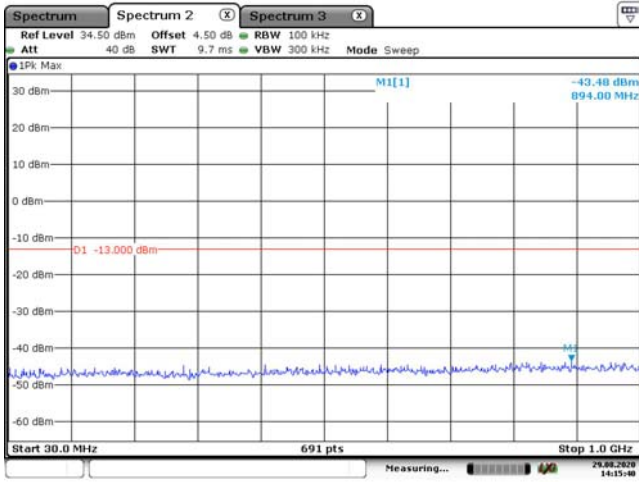
5M, QPSK, Middle Channel



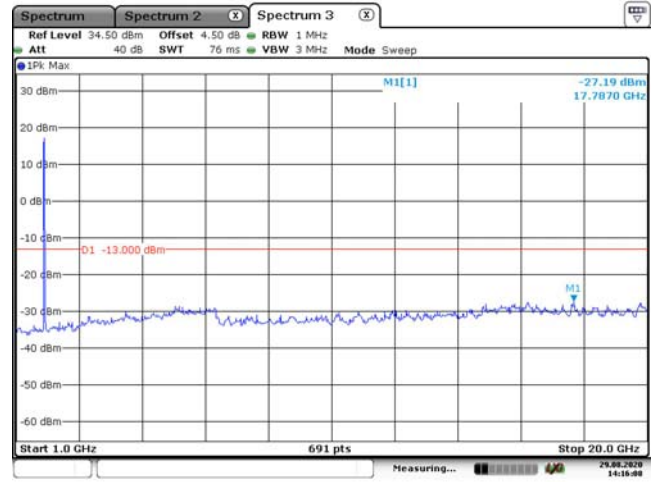
5M, QPSK, High Channel



10M, QPSK, Low Channel

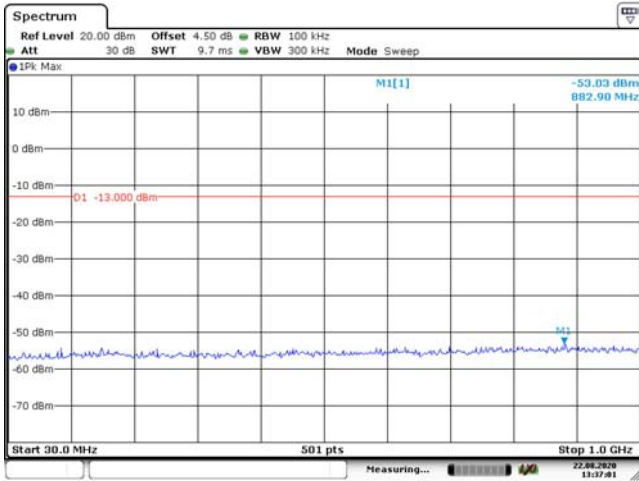


Date: 29.AUG.2020 14:15:40

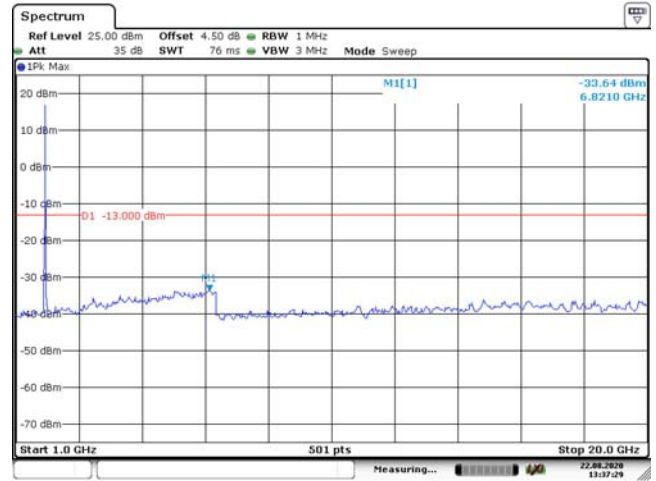


Date: 29.AUG.2020 14:16:08

10M, QPSK, Middle Channel

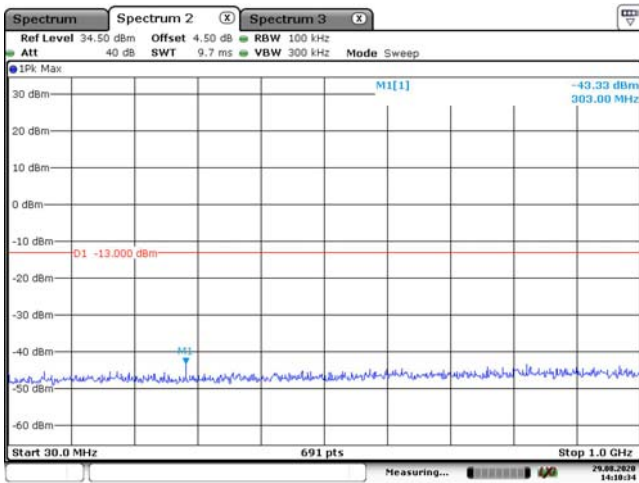


Date: 22.AUG.2020 13:37:01

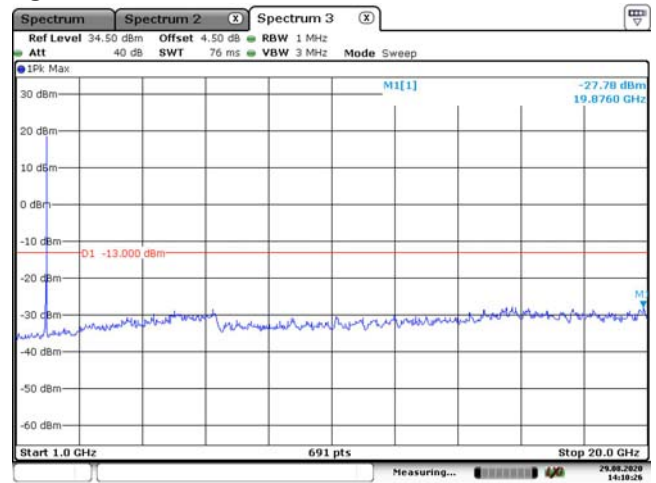


Date: 22.AUG.2020 13:37:29

10M, QPSK, High Channel

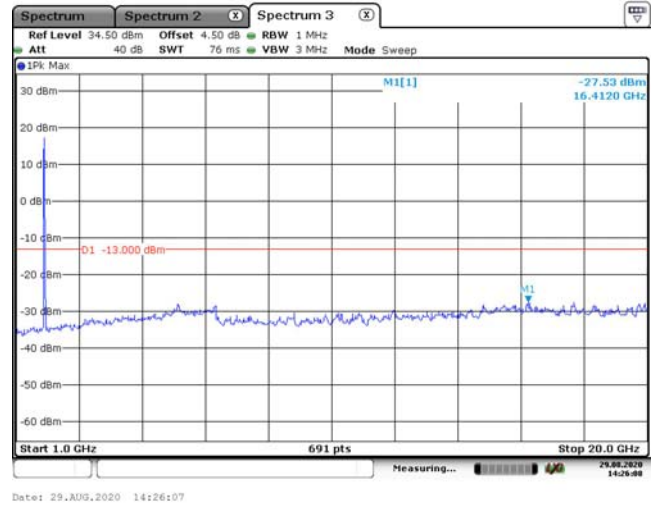
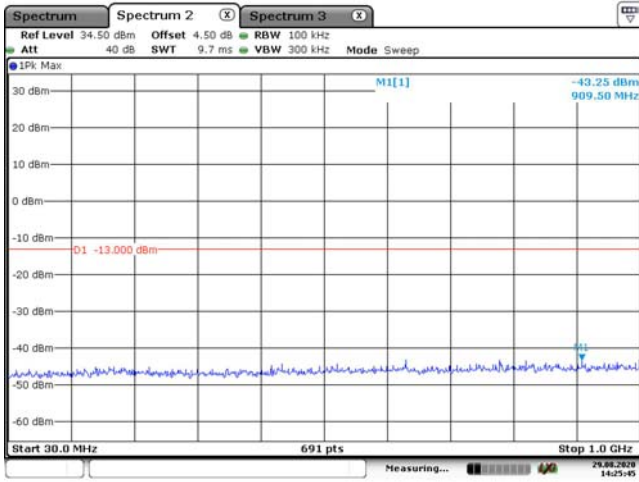


Date: 29.AUG.2020 14:10:34

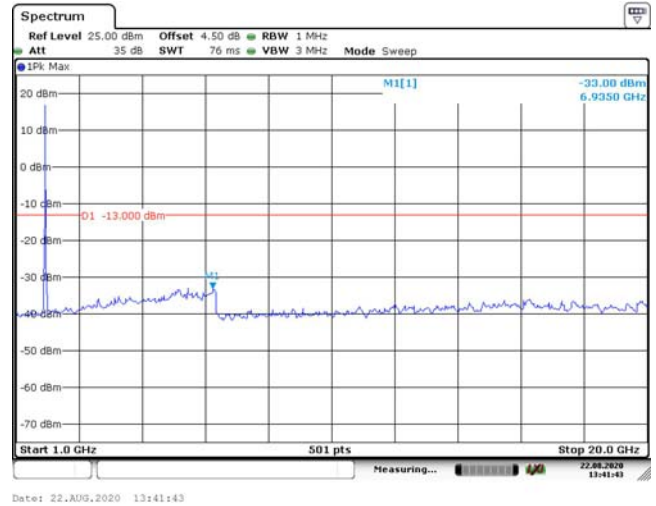
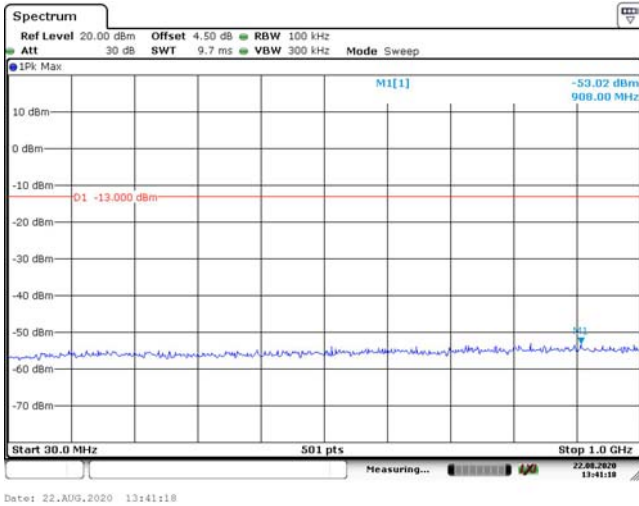


Date: 29.AUG.2020 14:10:26

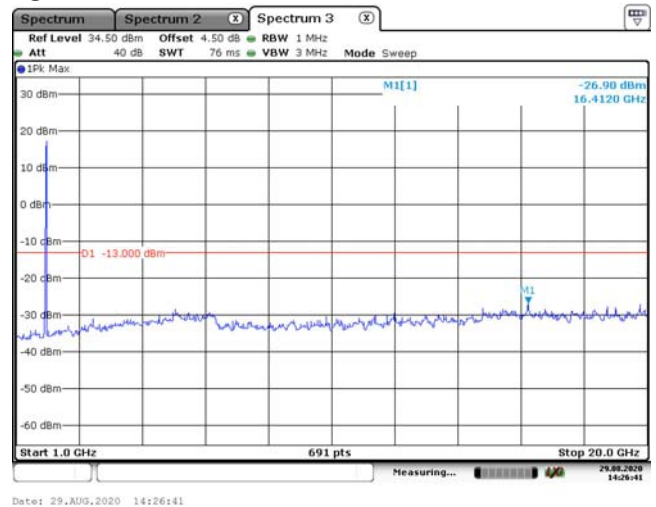
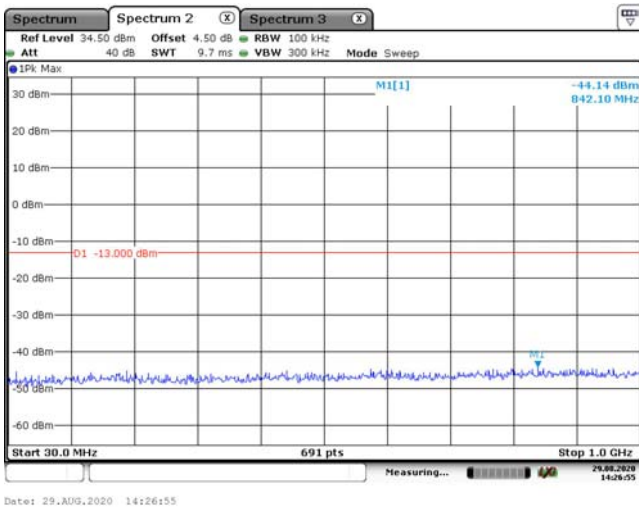
15M, QPSK, Low Channel



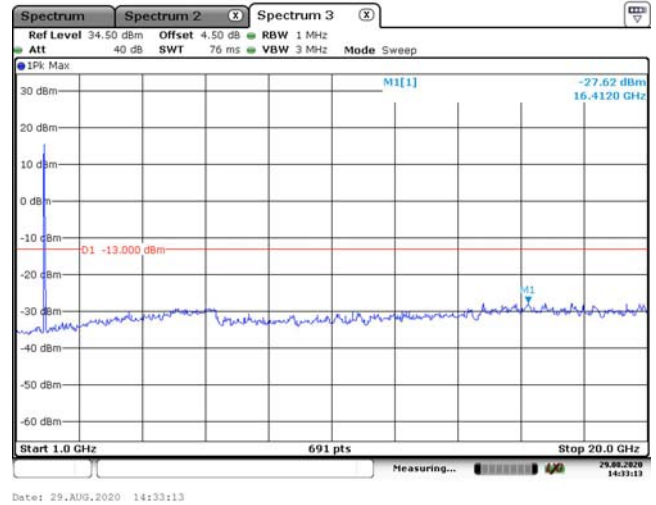
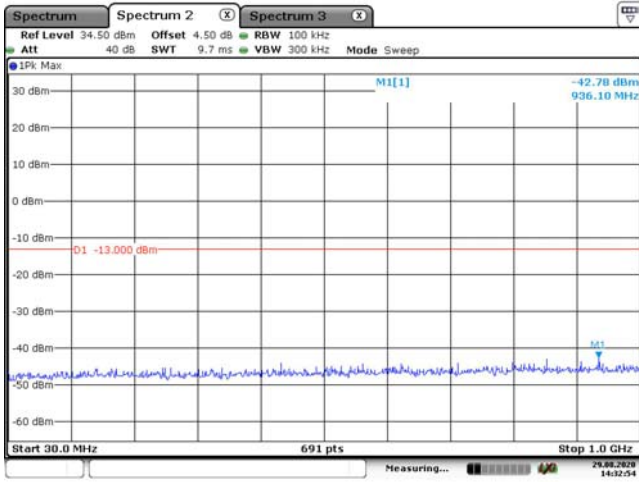
15M, QPSK, Middle Channel



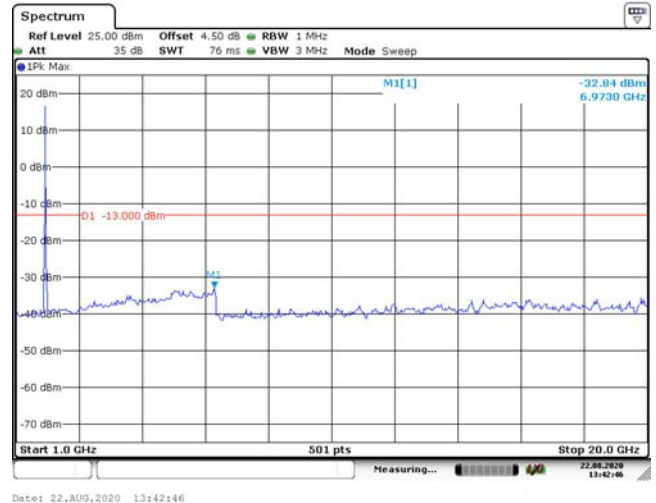
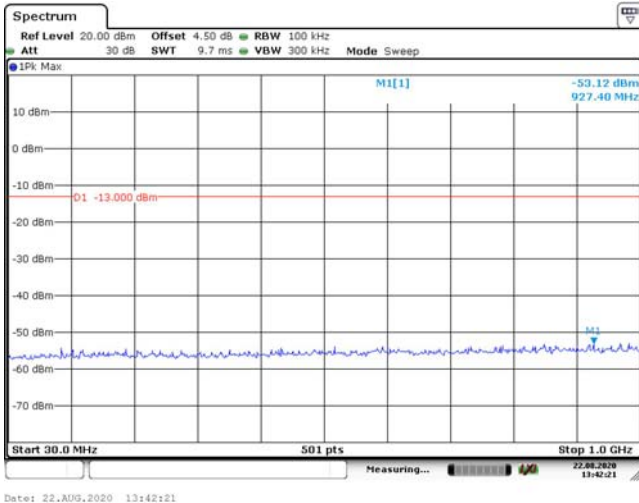
15M, QPSK, High Channel



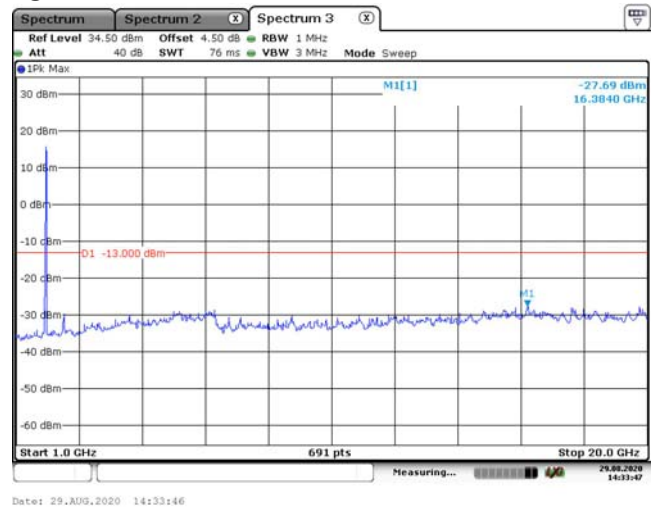
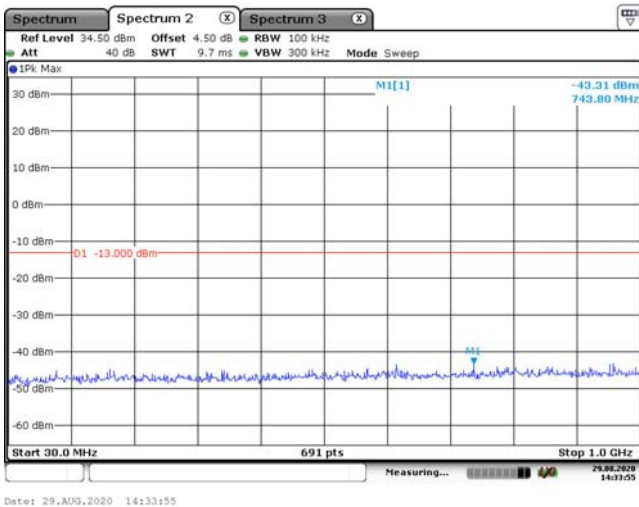
20M, QPSK, Low Channel



20M, QPSK, Middle Channel

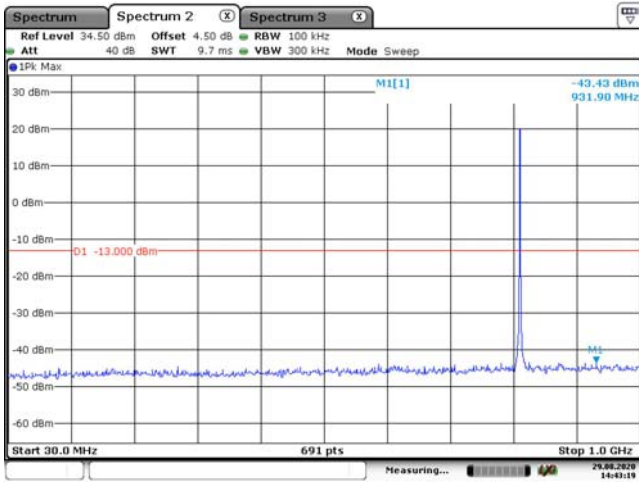


20M, QPSK, High Channel

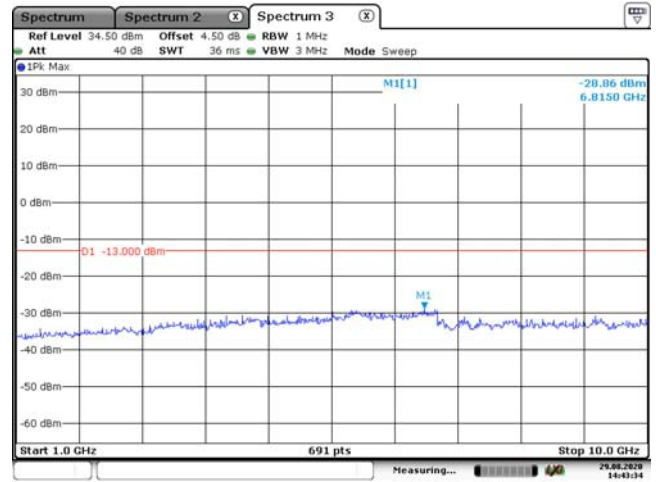


LTE Band 26:

1.4M, QPSK, Low Channel

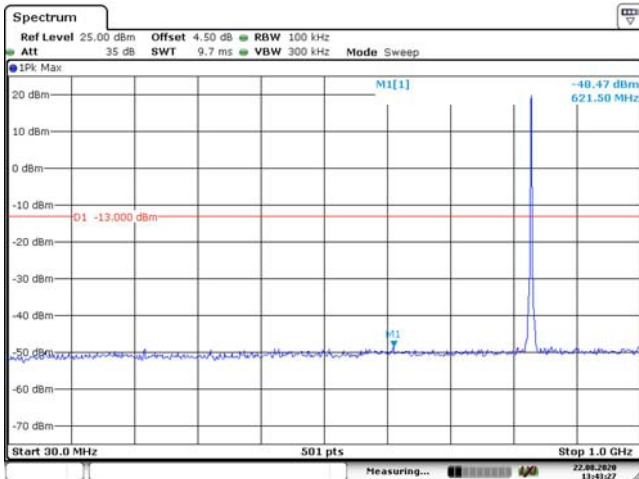


Date: 29.AUG.2020 14:43:19

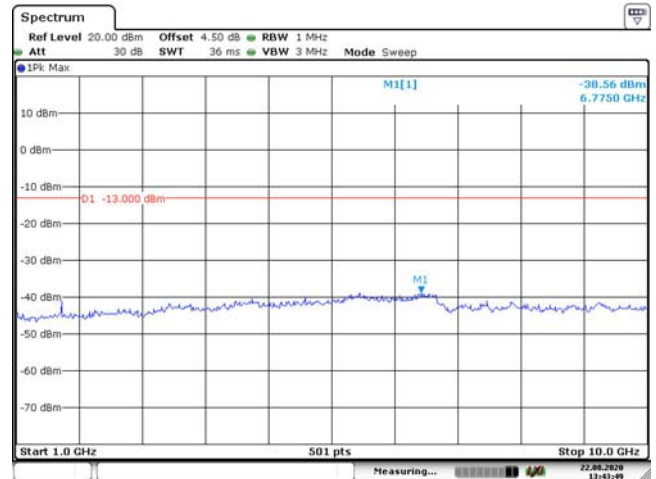


Date: 29.AUG.2020 14:43:34

1.4M, QPSK, Middle Channel

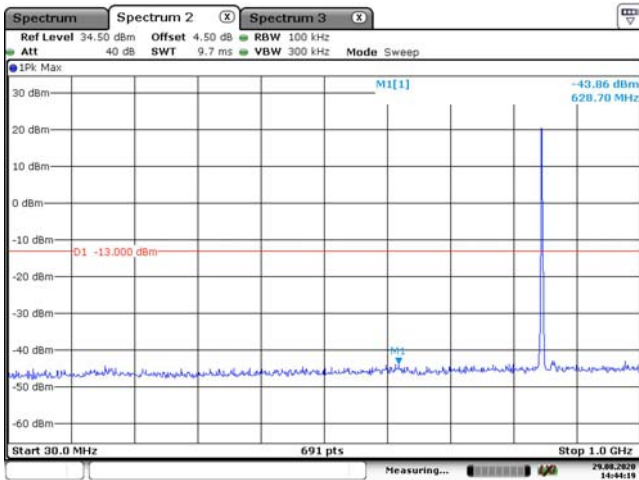


Date: 22.AUG.2020 13:43:27

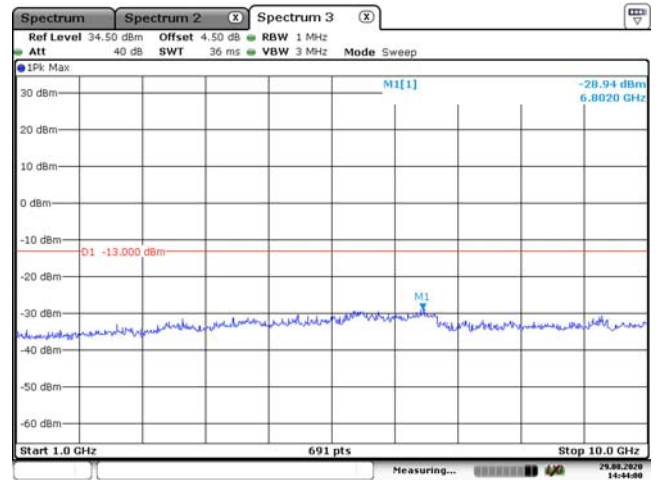


Date: 22.AUG.2020 13:43:49

1.4M, QPSK, High Channel

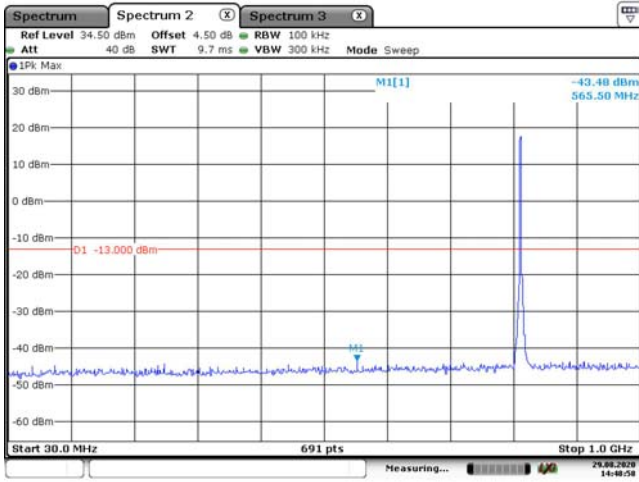


Date: 29.AUG.2020 14:44:19

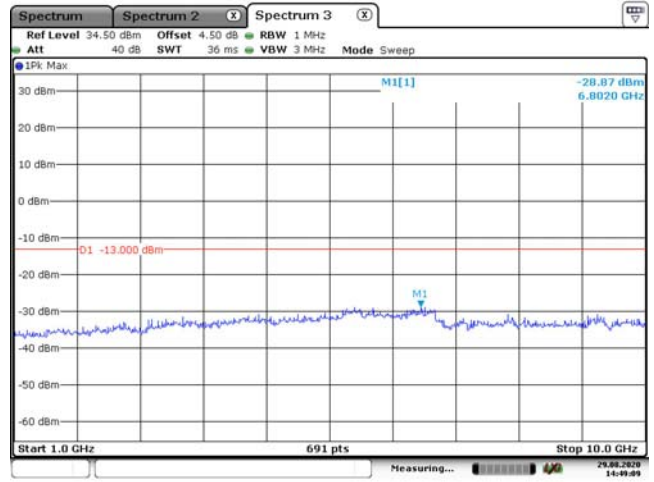


Date: 29.AUG.2020 14:44:00

3M, QPSK, Low Channel

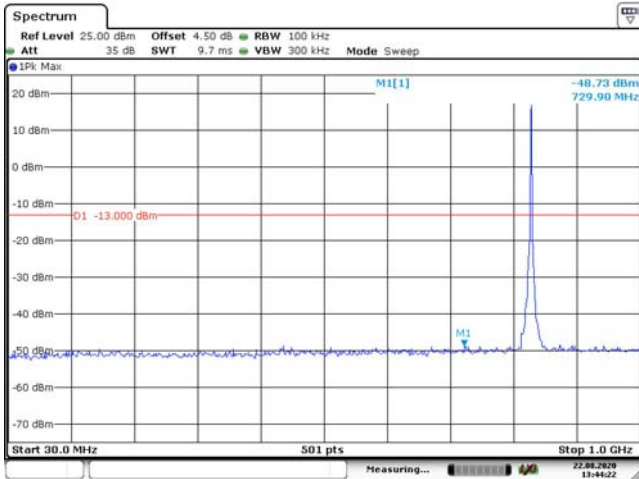


Date: 29.AUG.2020 14:48:58

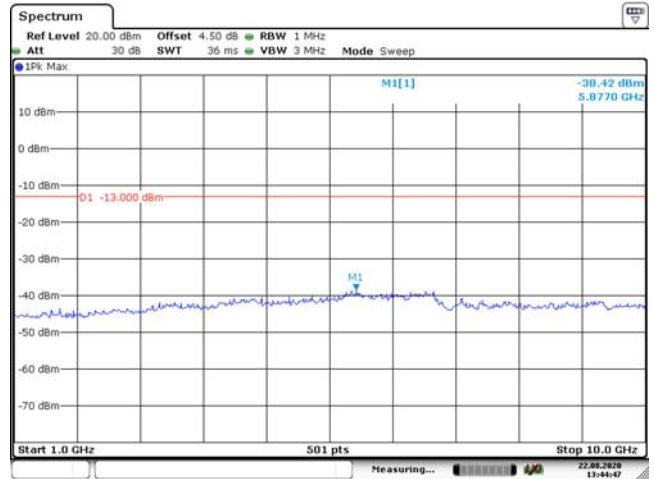


Date: 29.AUG.2020 14:49:09

3M, QPSK, Middle Channel

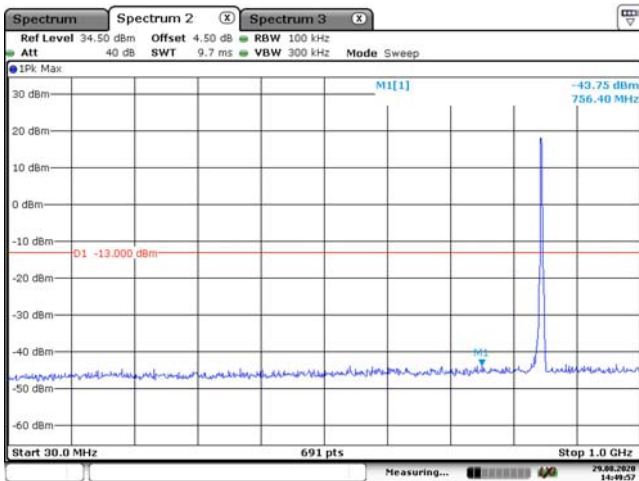


Date: 22.AUG.2020 13:44:22

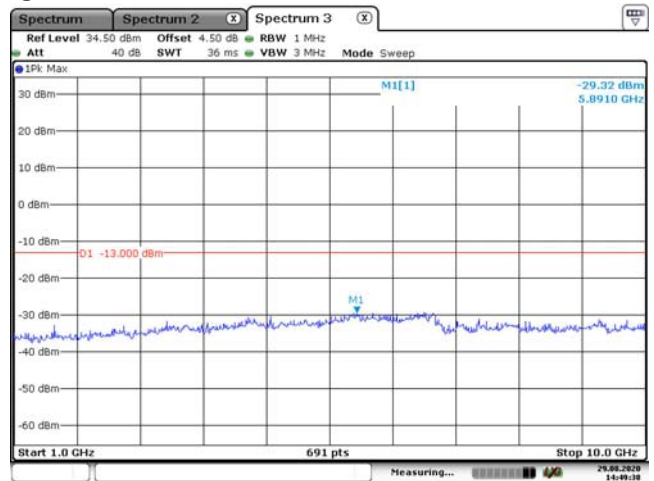


Date: 22.AUG.2020 13:44:47

3M, QPSK, High Channel

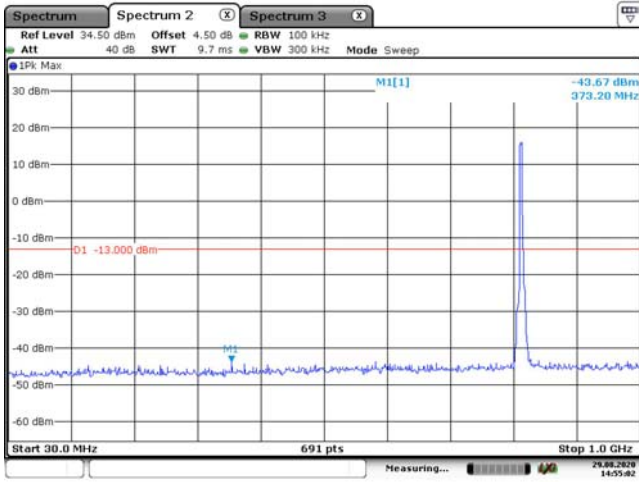


Date: 29.AUG.2020 14:49:57

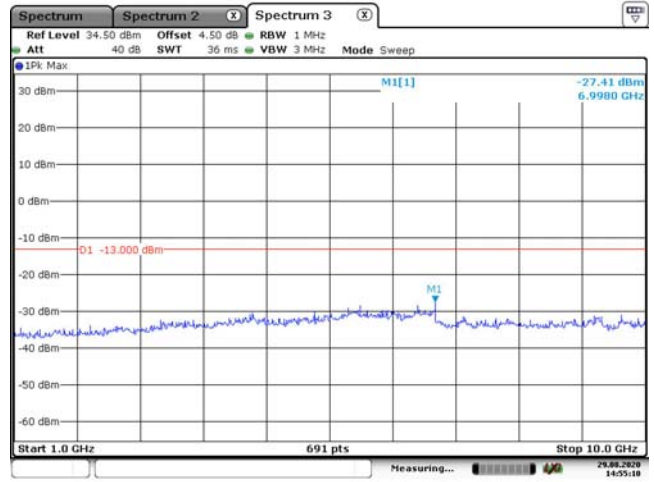


Date: 29.AUG.2020 14:49:38

5M, QPSK, Low Channel

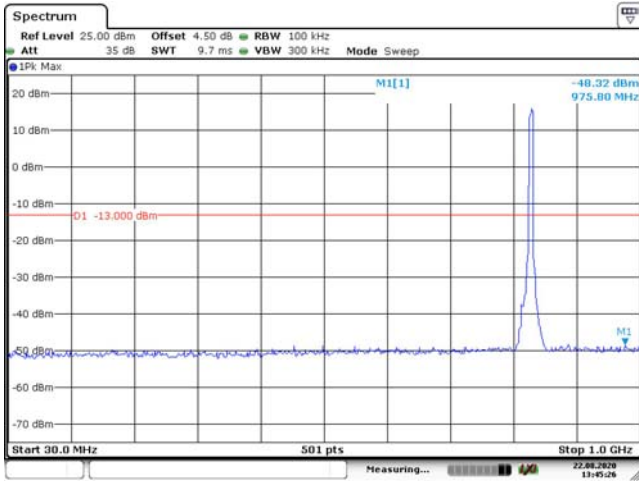


Date: 29.AUG.2020 14:55:02

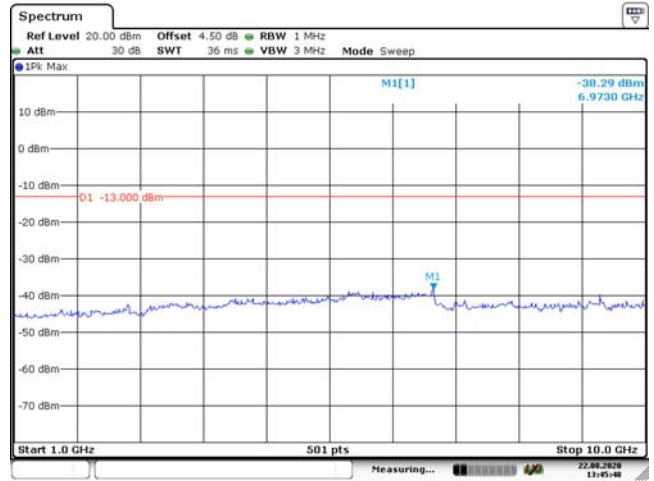


Date: 29.AUG.2020 14:55:10

5M, QPSK, Middle Channel

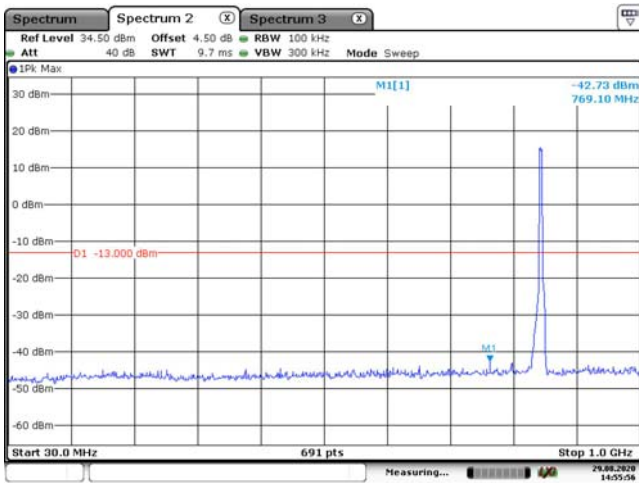


Date: 22.AUG.2020 13:45:26

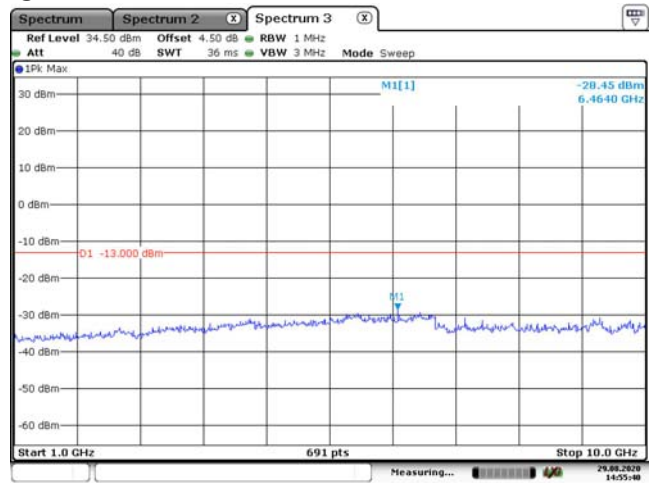


Date: 22.AUG.2020 13:45:48

5M, QPSK, High Channel

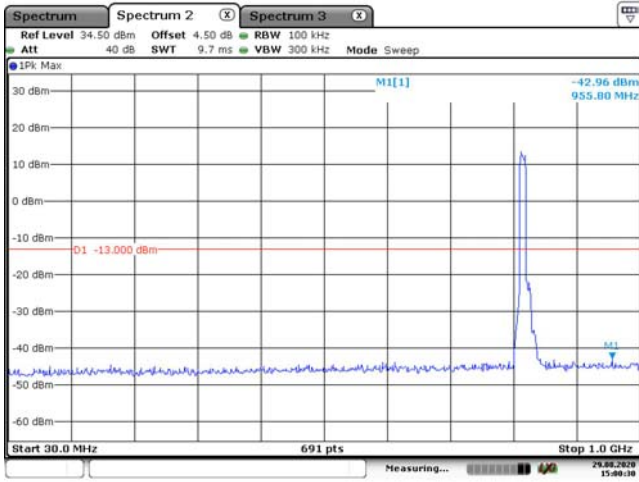


Date: 29.AUG.2020 14:55:16

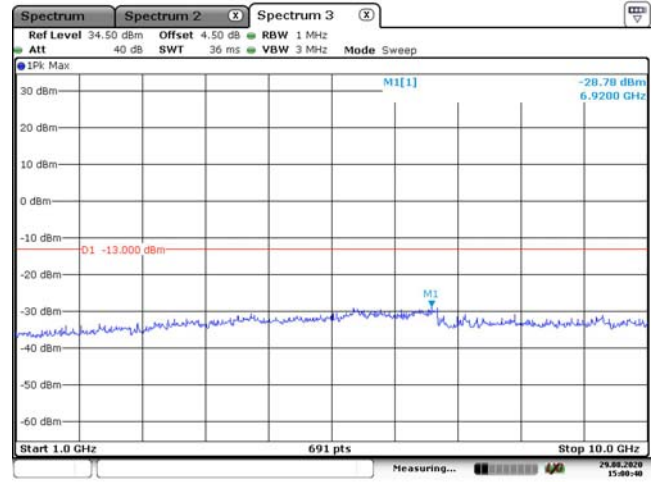


Date: 29.AUG.2020 14:55:40

10M, QPSK, Low Channel

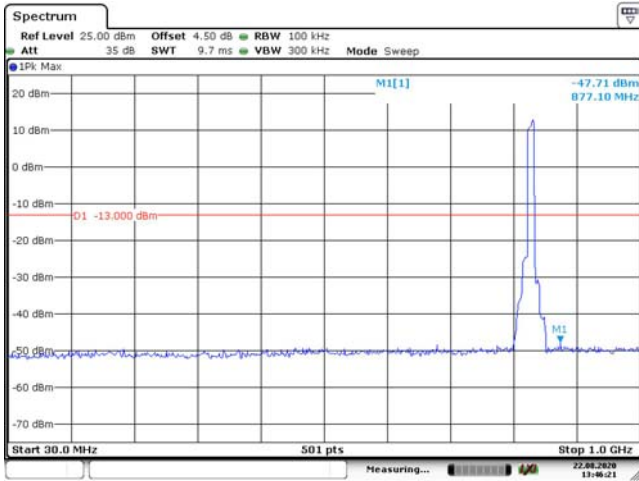


Date: 29.AUG.2020 15:00:30

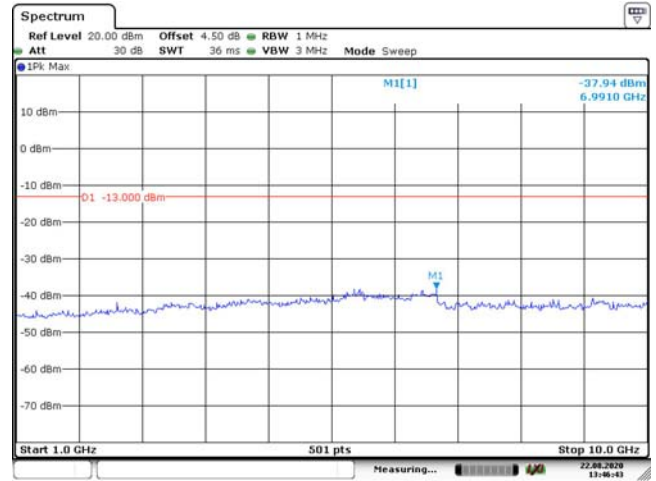


Date: 29.AUG.2020 15:00:40

10M, QPSK, Middle Channel

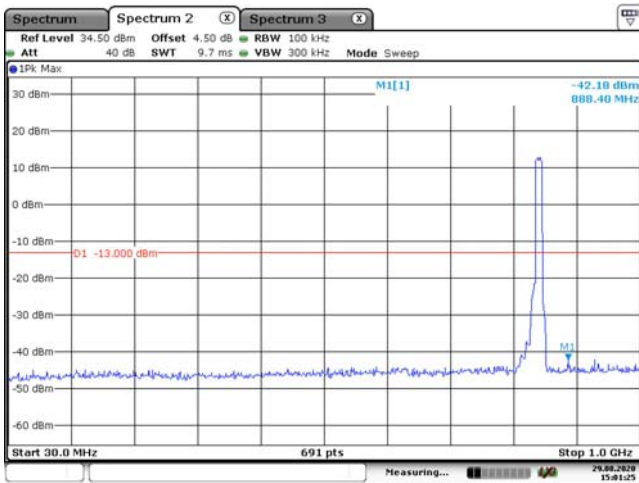


Date: 22.AUG.2020 13:46:21

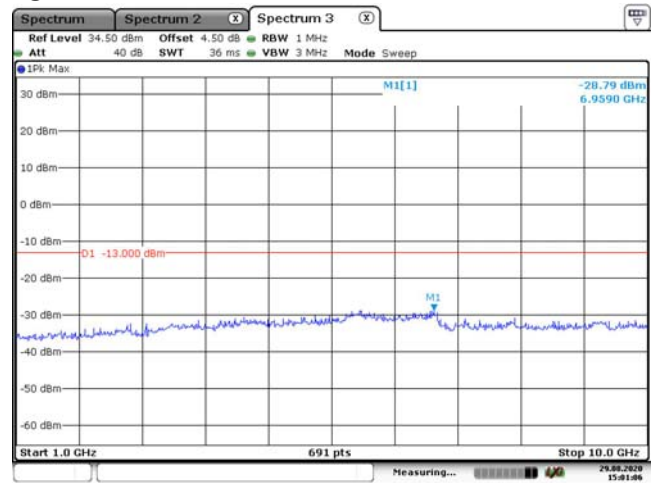


Date: 22.AUG.2020 13:46:43

10M, QPSK, High Channel

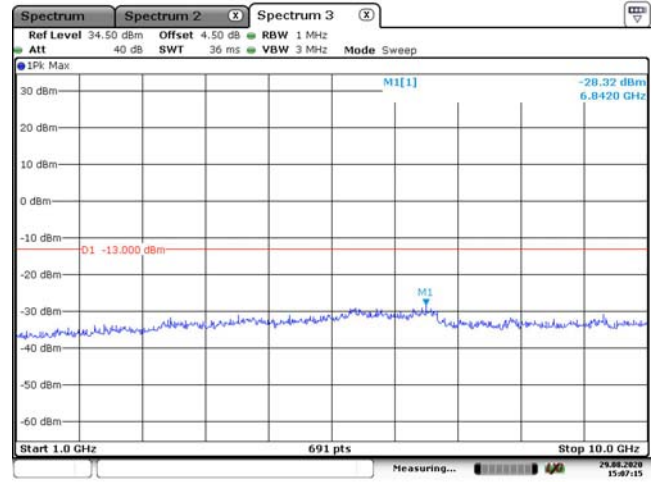
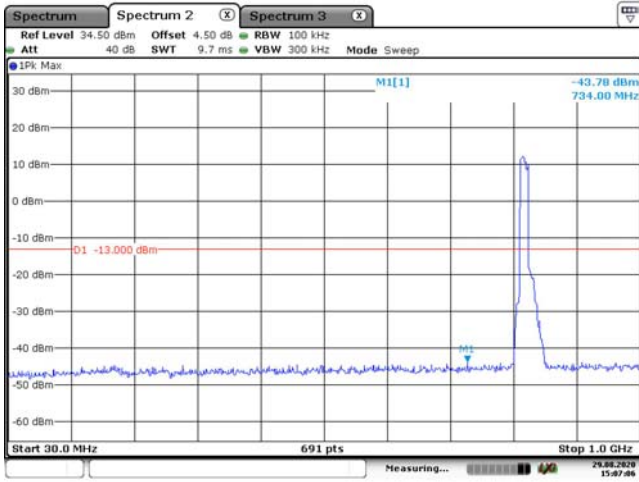


Date: 29.AUG.2020 15:01:25



Date: 29.AUG.2020 15:01:06

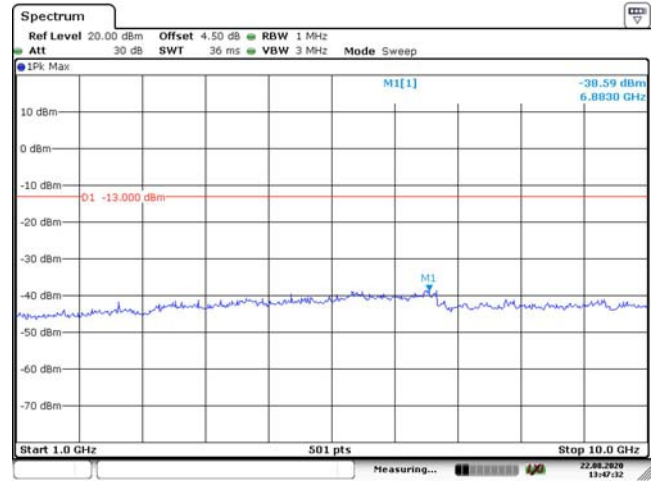
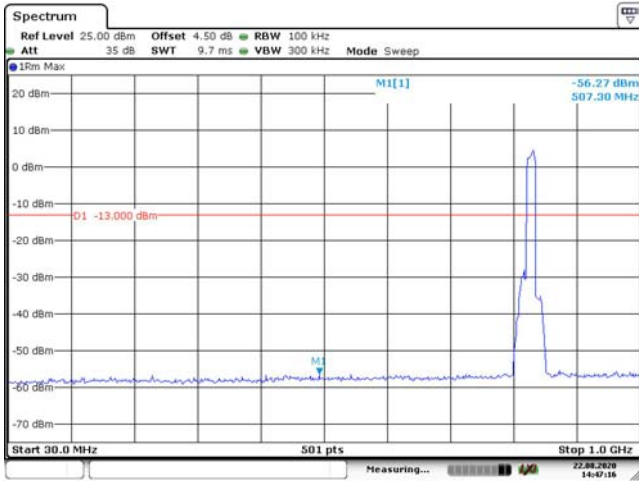
15M, QPSK, Low Channel



Date: 29.AUG.2020 15:07:06

Date: 29.AUG.2020 15:07:15

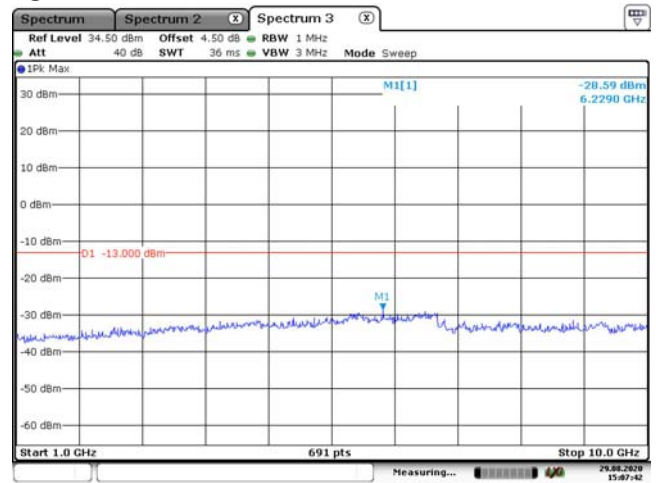
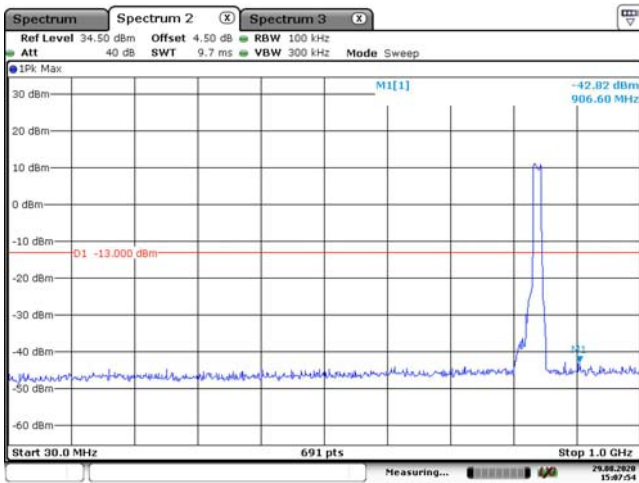
15M, QPSK, Middle Channel



Date: 22.AUG.2020 14:47:16

Date: 22.AUG.2020 13:47:32

15M, QPSK, High Channel



Date: 29.AUG.2020 15:07:54

Date: 29.AUG.2020 15:07:42

FCC §2.1053, §22.917 & §24.238 & §27.53 & §90.691 - SPURIOUS RADIATED EMISSIONS

Applicable Standard

FCC § 2.1053, §22.917, § 24.238 and § 27.53, §90.691;

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
Radiation Below 1G Test					
Sunol Sciences	Antenna	JB3	A060611-1	2017-11-10	2020-11-10
R&S	EMI Test Receiver	ESR3	102453	2019-09-12	2020-09-12
Unknown	Coaxial Cable	C-NJNJ-50	C-0075-01	2019-09-05	2020-09-05
Unknown	Coaxial Cable	C-NJNJ-50	C-0400-01	2019-09-05	2020-09-05
Unknown	Coaxial Cable	C-NJNJ-50	C-1400-01	2020-05-06	2021-05-06
HP	Amplifier	8447D	2727A05902	2019-09-05	2020-09-05
EMCO	Adjustable Dipole Antenna	3121C	9109-753	N/A	N/A
Unknown	Coaxial Cable	C-NJNJ-50	C-0200-02	2019-09-05	2020-09-05
Agilent	Signal Generator	E8247C	MY43321350	2019-12-10	2020-12-10
Radiation Above 1G Test					
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
Micro-tronics	High Pass Filter	HPM50111	S/N-G217	2020-06-16	2021-06-16
Agilent	Signal Generator	E8247C	MY43321350	2019-12-10	2020-12-10
Sinoscite	Band-stop filter	BSF1710-1785MN-0383-003	0383003	2020-06-16	2021-06-16
Sinoscite	Band-stop filter	BSF1850-1910MS-0935V2	0935V2	2020-06-16	2021-06-16
Sinoscite	Band-stop filter	BSF2500-2750MS-1439-001	1437001	2020-06-16	2021-06-16
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	2020-06-27	2021-06-27

* **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:	25.7 °C	24.3°C
Relative Humidity:	43%	38 %
ATM Pressure:	100.8 kPa	100 kPa
Tester:	Joker Chen	Calor Jia
Test Date:	2020-08-21	2020-08-21

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)			
WCDMA Band 5 Frequency:826.4 MHz								
1652.80	H	37.63	-66.50	10.47	0.72	-56.75	-13.00	43.75
1652.80	V	37.78	-66.95	10.47	0.72	-57.20	-13.00	44.20
2479.20	H	40.53	-62.28	12.93	1.25	-50.60	-13.00	37.60
2479.20	V	44.40	-58.45	12.93	1.25	-46.77	-13.00	33.77
3305.60	H	36.99	-62.81	13.63	1.59	-50.77	-13.00	37.77
3305.60	V	37.39	-62.42	13.63	1.59	-50.38	-13.00	37.38
446.20	H	35.40	-69.14	0.00	0.66	-69.80	-13.00	56.80
600.30	V	34.99	-70.40	0.00	0.76	-71.16	-13.00	58.16
WCDMA Band 5 Frequency:836.6MHz								
1673.20	H	37.66	-66.28	10.61	0.73	-56.40	-13.00	43.40
1673.20	V	37.99	-66.55	10.61	0.73	-56.67	-13.00	43.67
2509.80	H	40.68	-62.23	13.11	1.25	-50.37	-13.00	37.37
2509.80	V	44.59	-58.35	13.11	1.25	-46.49	-13.00	33.49
3346.40	H	37.21	-62.47	13.83	1.61	-50.25	-13.00	37.25
3346.40	V	37.66	-62.06	13.83	1.61	-49.84	-13.00	36.84
471.50	H	35.62	-68.78	0.00	0.68	-69.46	-13.00	56.46
673.60	V	35.23	-69.06	0.00	0.89	-69.95	-13.00	56.95
WCDMA Band 5 Frequency:846.6MHz								
1693.20	H	37.45	-66.30	10.75	0.75	-56.30	-13.00	43.30
1693.20	V	37.87	-66.48	10.75	0.75	-56.48	-13.00	43.48
2539.80	H	40.45	-62.49	13.14	1.27	-50.62	-13.00	37.62
2539.80	V	44.53	-58.53	13.14	1.27	-46.66	-13.00	33.66
3386.40	H	37.10	-62.45	14.03	1.63	-50.05	-13.00	37.05
3386.40	V	37.44	-62.20	14.03	1.63	-49.80	-13.00	36.80
399.70	H	35.40	-69.42	0.00	0.61	-70.03	-13.00	57.03
522.60	V	35.10	-71.74	0.00	0.72	-72.46	-13.00	59.46

PCS Band (PART 24E)

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 II, Frequency:1852.4 MHz								
3704.80	H	37.64	-60.32	13.98	1.81	-48.15	-13.00	35.15
3704.80	V	37.37	-60.56	13.98	1.81	-48.39	-13.00	35.39
5557.20	H	36.29	-57.60	13.97	1.27	-44.90	-13.00	31.90
5557.20	V	35.55	-58.19	13.97	1.27	-45.49	-13.00	32.49
496.30	H	50.97	-53.28	0.00	0.71	-53.99	-13.00	40.99
144.20	V	52.58	-60.06	0.00	0.36	-60.42	-13.00	47.42
WCDMA Band II, Frequency:1880 MHz								
3760.00	H	37.66	-59.98	13.76	1.63	-47.85	-13.00	34.85
3760.00	V	37.56	-59.94	13.76	1.63	-47.81	-13.00	34.81
5640.00	H	36.34	-57.25	14.02	1.31	-44.54	-13.00	31.54
5640.00	V	35.76	-57.72	14.02	1.31	-45.01	-13.00	32.01
527.60	H	51.21	-52.44	0.00	0.72	-53.16	-13.00	40.16
138.80	V	52.60	-59.99	0.00	0.35	-60.34	-13.00	47.34
WCDMA Band II, Frequency:1907.6MHz								
3815.20	H	37.61	-59.67	13.57	1.50	-47.60	-13.00	34.60
3815.20	V	37.54	-59.56	13.57	1.50	-47.49	-13.00	34.49
5722.80	H	36.32	-57.44	13.95	1.32	-44.81	-13.00	31.81
5722.80	V	35.49	-58.23	13.95	1.32	-45.60	-13.00	32.60
601.40	H	51.06	-51.06	0.00	0.76	-51.82	-13.00	38.82
97.60	V	52.42	-60.55	0.00	0.28	-60.83	-13.00	47.83

PCS Band (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:1712.4 MHz								
3424.80	H	37.45	-61.94	14.03	1.63	-49.54	-13.00	36.54
3424.80	V	36.89	-62.57	14.03	1.63	-50.17	-13.00	37.17
5137.20	H	35.96	-58.72	13.94	1.39	-46.17	-13.00	33.17
5137.20	V	35.78	-58.82	13.94	1.39	-46.27	-13.00	33.27
316.50	H	55.22	-52.79	0.00	0.53	-53.32	-13.00	40.32
288.30	V	54.28	-56.33	0.00	0.52	-56.85	-13.00	43.85
WCDMA Band IV, Frequency:1732.6MHz								
3465.20	H	37.36	-61.82	13.90	1.62	-49.54	-13.00	36.54
3465.20	V	36.80	-62.42	13.90	1.62	-50.14	-13.00	37.14
5197.80	H	36.03	-58.66	14.00	1.52	-46.18	-13.00	33.18
5197.80	V	36.01	-58.75	14.00	1.52	-46.27	-13.00	33.27
343.70	H	55.11	-51.86	0.00	0.56	-52.42	-13.00	39.42
310.10	V	54.06	-55.74	0.00	0.53	-56.27	-13.00	43.27
WCDMA Band IV, Frequency:1752.6MHz								
3505.20	H	37.57	-61.44	13.82	1.60	-49.22	-13.00	36.22
3505.20	V	36.91	-62.10	13.82	1.60	-49.88	-13.00	36.88
5257.80	H	36.02	-59.03	14.17	1.31	-46.17	-13.00	33.17
5257.80	V	36.00	-59.13	14.17	1.31	-46.27	-13.00	33.27
367.20	H	55.07	-51.00	0.00	0.58	-51.58	-13.00	38.58
244.60	V	54.05	-58.37	0.00	0.50	-58.87	-13.00	45.87

LTE Band 2 (30MHz-20GHz):

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: 1850.7 MHz								
3701.40	H	37.34	-60.64	13.99	1.83	-48.48	-13.00	35.48
3701.40	V	37.02	-60.94	13.99	1.83	-48.78	-13.00	35.78
5552.10	H	35.41	-58.54	13.96	1.27	-45.85	-13.00	32.85
5552.10	V	36.19	-57.61	13.96	1.27	-44.92	-13.00	31.92
236.50	H	39.37	-69.71	0.00	0.50	-70.21	-13.00	57.21
441.30	V	43.24	-64.55	0.00	0.65	-65.20	-13.00	52.20
QPSK, Frequency: 1880 MHz								
3760.00	H	37.63	-60.01	13.76	1.63	-47.88	-13.00	34.88
3760.00	V	37.21	-60.29	13.76	1.63	-48.16	-13.00	35.16
5640.00	H	35.70	-57.89	14.02	1.31	-45.18	-13.00	32.18
5640.00	V	36.20	-57.28	14.02	1.31	-44.57	-13.00	31.57
985.30	H	39.62	-53.97	0.00	0.79	-54.76	-13.00	41.76
590.80	V	43.53	-62.03	0.00	0.76	-62.79	-13.00	49.79
QPSK, Frequency: 1909.3 MHz								
3818.60	H	37.45	-59.81	13.56	1.50	-47.75	-13.00	34.75
3818.60	V	37.09	-59.98	13.56	1.50	-47.92	-13.00	34.92
5727.90	H	35.53	-58.19	13.96	1.31	-45.54	-13.00	32.54
5727.90	V	36.15	-57.54	13.96	1.31	-44.89	-13.00	31.89
296.40	H	39.48	-69.20	0.00	0.52	-69.72	-13.00	56.72
76.80	V	43.52	-73.06	-1.60	0.34	-75.00	-13.00	62.00

LTE Band 4 (30MHz-20GHz):

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: 1710.7 MHz								
3421.40	H	39.58	-59.82	14.04	1.63	-47.41	-13.00	34.41
3421.40	V	40.79	-58.69	14.04	1.63	-46.28	-13.00	33.28
5132.10	H	36.39	-58.29	13.93	1.37	-45.73	-13.00	32.73
5132.10	V	37.19	-57.40	13.93	1.37	-44.84	-13.00	31.84
708.70	H	39.27	-61.92	0.00	0.94	-62.86	-13.00	49.86
567.20	V	44.09	-61.91	0.00	0.74	-62.65	-13.00	49.65
QPSK, Frequency: 1732.5 MHz								
3465.00	H	39.87	-59.32	13.91	1.62	-47.03	-13.00	34.03
3465.00	V	40.85	-58.37	13.91	1.62	-46.08	-13.00	33.08
5197.50	H	36.45	-58.24	14.00	1.52	-45.76	-13.00	32.76
5197.50	V	37.31	-57.45	14.00	1.52	-44.97	-13.00	31.97
985.30	H	39.54	-54.05	0.00	0.79	-54.84	-13.00	41.84
590.80	V	44.17	-61.39	0.00	0.76	-62.15	-13.00	49.15
QPSK, Frequency: 1754.3 MHz								
3508.60	H	39.68	-59.33	13.83	1.60	-47.10	-13.00	34.10
3508.60	V	40.76	-58.25	13.83	1.60	-46.02	-13.00	33.02
5262.90	H	36.30	-58.79	14.19	1.29	-45.89	-13.00	32.89
5262.90	V	37.16	-58.01	14.19	1.29	-45.11	-13.00	32.11
663.10	H	39.52	-62.17	0.00	0.87	-63.04	-13.00	50.04
537.60	V	44.09	-62.47	0.00	0.73	-63.20	-13.00	50.20

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: 824.7 MHz								
1649.40	H	56.46	-47.71	10.45	0.71	-37.97	-13.00	24.97
1649.40	V	52.01	-52.76	10.45	0.71	-43.02	-13.00	30.02
2474.10	H	40.97	-61.82	12.89	1.25	-50.18	-13.00	37.18
2474.10	V	44.92	-57.92	12.89	1.25	-46.28	-13.00	33.28
3298.80	H	36.88	-62.93	13.60	1.59	-50.92	-13.00	37.92
3298.80	V	37.06	-62.75	13.60	1.59	-50.74	-13.00	37.74
522.90	H	36.76	-66.99	0.00	0.72	-67.71	-13.00	54.71
106.20	V	42.17	-70.05	0.00	0.27	-70.32	-13.00	57.32
QPSK, Frequency: 836.5 MHz								
1673.00	H	56.65	-47.29	10.61	0.73	-37.41	-13.00	24.41
1673.00	V	52.05	-52.49	10.61	0.73	-42.61	-13.00	29.61
2509.50	H	41.13	-61.78	13.11	1.25	-49.92	-13.00	36.92
2509.50	V	45.16	-57.78	13.11	1.25	-45.92	-13.00	32.92
3346.00	H	37.12	-62.56	13.83	1.61	-50.34	-13.00	37.34
3346.00	V	37.09	-62.63	13.83	1.61	-50.41	-13.00	37.41
637.10	H	36.77	-65.10	0.00	0.83	-65.93	-13.00	52.93
129.00	V	42.23	-69.27	0.00	0.33	-69.60	-13.00	56.60
QPSK, Frequency: 848.3 MHz								
1696.60	H	56.51	-47.20	10.78	0.75	-37.17	-13.00	24.17
1696.60	V	51.78	-52.53	10.78	0.75	-42.50	-13.00	29.50
2544.90	H	40.92	-62.03	13.14	1.27	-50.16	-13.00	37.16
2544.90	V	44.88	-58.20	13.14	1.27	-46.33	-13.00	33.33
3393.20	H	36.85	-62.68	14.07	1.64	-50.25	-13.00	37.25
3393.20	V	37.02	-62.60	14.07	1.64	-50.17	-13.00	37.17
496.30	H	36.50	-67.75	0.00	0.71	-68.46	-13.00	55.46
82.60	V	41.95	-74.68	0.00	0.37	-75.05	-13.00	62.05

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: 2502.5 MHz								
5005.00	H	36.41	-59.66	14.00	1.43	-47.09	-25.00	22.09
5005.00	V	36.37	-59.46	14.00	1.43	-46.89	-25.00	21.89
7507.50	H	36.87	-51.77	13.20	1.33	-39.90	-25.00	14.90
7507.50	V	37.21	-51.91	13.20	1.33	-40.04	-25.00	15.04
244.30	H	37.21	-71.96	0.00	0.50	-72.46	-25.00	47.46
62.10	V	36.99	-71.73	-9.19	0.23	-81.15	-25.00	56.15
QPSK, Frequency: 2535 MHz								
5070.00	H	36.18	-58.93	13.93	1.34	-46.34	-25.00	21.34
5070.00	V	36.09	-58.83	13.93	1.34	-46.24	-25.00	21.24
7605.00	H	36.82	-52.06	13.21	1.40	-40.25	-25.00	15.25
7605.00	V	37.11	-52.17	13.21	1.40	-40.36	-25.00	15.36
204.30	H	36.95	-71.74	0.00	0.49	-72.23	-25.00	47.23
156.20	V	36.94	-75.47	0.00	0.39	-75.86	-25.00	50.86
QPSK, Frequency: 2567.5 MHz								
5135.00	H	36.39	-58.29	13.94	1.38	-45.73	-25.00	20.73
5135.00	V	36.13	-58.46	13.94	1.38	-45.90	-25.00	20.90
7702.50	H	36.69	-52.43	13.40	1.47	-40.50	-25.00	15.50
7702.50	V	37.01	-52.43	13.40	1.47	-40.50	-25.00	15.50
299.10	H	37.06	-71.59	0.00	0.52	-72.11	-25.00	47.11
77.30	V	36.91	-79.89	-1.35	0.34	-81.58	-25.00	56.58

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: 699.7 MHz								
1399.40	H	47.01	-56.38	9.00	1.20	-48.58	-13.00	35.58
1399.40	V	47.23	-56.76	9.00	1.20	-48.96	-13.00	35.96
2099.10	H	41.24	-60.83	11.41	1.10	-50.52	-13.00	37.52
2099.10	V	41.48	-60.59	11.41	1.10	-50.28	-13.00	37.28
2798.80	H	46.26	-55.46	13.10	1.36	-43.72	-13.00	30.72
2798.80	V	47.38	-54.54	13.10	1.36	-42.80	-13.00	29.80
543.30	H	35.99	-67.33	0.00	0.73	-68.06	-13.00	55.06
708.70	V	35.85	-67.92	0.00	0.94	-68.86	-13.00	55.86
QPSK, Frequency: 707.5 MHz								
1415.00	H	47.12	-56.49	9.08	1.22	-48.63	-13.00	35.63
1415.00	V	47.51	-56.62	9.08	1.22	-48.76	-13.00	35.76
2122.50	H	41.50	-60.51	11.27	1.11	-50.35	-13.00	37.35
2122.50	V	41.70	-60.29	11.27	1.11	-50.13	-13.00	37.13
2830.00	H	46.37	-55.05	13.34	1.36	-43.07	-13.00	30.07
2830.00	V	47.47	-54.18	13.34	1.36	-42.20	-13.00	29.20
366.20	H	36.19	-69.91	0.00	0.58	-70.49	-13.00	57.49
233.90	V	35.90	-76.05	0.00	0.50	-76.55	-13.00	63.55
QPSK, Frequency: 715.3 MHz								
1430.60	H	47.05	-56.79	9.15	1.25	-48.89	-13.00	35.89
1430.60	V	47.27	-57.01	9.15	1.25	-49.11	-13.00	36.11
2145.90	H	41.34	-60.62	11.12	1.12	-50.62	-13.00	37.62
2145.90	V	41.63	-60.29	11.12	1.12	-50.29	-13.00	37.29
2861.20	H	46.08	-55.03	13.59	1.35	-42.79	-13.00	29.79
2861.20	V	47.33	-54.04	13.59	1.35	-41.80	-13.00	28.80
499.60	H	36.18	-68.05	0.00	0.71	-68.76	-13.00	55.76
833.70	V	35.87	-65.44	0.00	0.97	-66.41	-13.00	53.41

LTE Band 13 (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: 779.5 MHz								
1559.00	H	40.93	-63.80	9.85	0.95	-54.90	-13.00	41.90
1559.00	V	39.80	-65.32	9.85	0.95	-56.42	-13.00	43.42
2338.50	H	37.59	-64.68	11.62	1.25	-54.31	-13.00	41.31
2338.50	V	40.32	-61.96	11.62	1.25	-51.59	-13.00	38.59
3118.00	H	37.26	-62.44	13.27	1.78	-50.95	-13.00	37.95
3118.00	V	36.90	-62.81	13.27	1.78	-51.32	-13.00	38.32
586.10	H	36.51	-65.91	0.00	0.75	-66.66	-13.00	53.66
255.30	V	36.50	-75.88	0.00	0.51	-76.39	-13.00	63.39
QPSK, Frequency: 782 MHz								
1564.00	H	41.13	-63.59	9.88	0.92	-54.63	-13.00	41.63
1564.00	V	39.96	-65.18	9.88	0.92	-56.22	-13.00	43.22
2346.00	H	37.67	-64.62	11.71	1.26	-54.17	-13.00	41.17
2346.00	V	40.37	-61.96	11.71	1.26	-51.51	-13.00	38.51
3128.00	H	37.47	-62.11	13.31	1.76	-50.56	-13.00	37.56
3128.00	V	37.08	-62.51	13.31	1.76	-50.96	-13.00	37.96
637.10	H	36.59	-65.28	0.00	0.83	-66.11	-13.00	53.11
637.10	V	36.75	-68.09	0.00	0.83	-68.92	-13.00	55.92
QPSK, Frequency: 784.5 MHz								
1569.00	H	40.89	-63.82	9.91	0.89	-54.80	-13.00	41.80
1569.00	V	39.82	-65.33	9.91	0.89	-56.31	-13.00	43.31
2353.50	H	37.44	-64.88	11.79	1.26	-54.35	-13.00	41.35
2353.50	V	40.29	-62.09	11.79	1.26	-51.56	-13.00	38.56
3138.00	H	37.33	-62.12	13.35	1.73	-50.50	-13.00	37.50
3138.00	V	36.95	-62.52	13.35	1.73	-50.90	-13.00	37.90
622.70	H	36.34	-65.63	0.00	0.80	-66.43	-13.00	53.43
471.20	V	36.58	-70.94	0.00	0.68	-71.62	-13.00	58.62

LTE Band 25 (30MHz-20GHz):

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: 1850.7 MHz								
3701.40	H	36.99	-60.99	13.99	1.83	-48.83	-13.00	35.83
3701.40	V	37.60	-60.36	13.99	1.83	-48.20	-13.00	35.20
5552.10	H	36.37	-57.58	13.96	1.27	-44.89	-13.00	31.89
5552.10	V	37.03	-56.77	13.96	1.27	-44.08	-13.00	31.08
7402.80	H	35.93	-53.05	13.30	1.42	-41.17	-13.00	28.17
7402.80	V	35.54	-53.80	13.30	1.42	-41.92	-13.00	28.92
661.20	H	39.65	-62.05	0.00	0.87	-62.92	-13.00	49.92
382.10	V	42.72	-65.77	0.00	0.59	-66.36	-13.00	53.36
QPSK, Frequency: 1882.5 MHz								
3765.00	H	37.26	-60.35	13.74	1.62	-48.23	-13.00	35.23
3765.00	V	37.84	-59.62	13.74	1.62	-47.50	-13.00	34.50
5647.50	H	36.42	-57.22	14.01	1.31	-44.52	-13.00	31.52
5647.50	V	37.15	-56.37	14.01	1.31	-43.67	-13.00	30.67
7530.00	H	36.13	-52.56	13.20	1.34	-40.70	-13.00	27.70
7530.00	V	35.60	-53.56	13.20	1.34	-41.70	-13.00	28.70
985.30	H	39.83	-53.76	0.00	0.79	-54.55	-13.00	41.55
590.80	V	42.99	-62.57	0.00	0.76	-63.33	-13.00	50.33
QPSK, Frequency: 1914.3 MHz								
3828.60	H	37.04	-60.14	13.54	1.51	-48.11	-13.00	35.11
3828.60	V	37.55	-59.46	13.54	1.51	-47.43	-13.00	34.43
5742.90	H	36.25	-57.36	13.99	1.30	-44.67	-13.00	31.67
5742.90	V	36.99	-56.60	13.99	1.30	-43.91	-13.00	30.91
7657.20	H	35.95	-53.06	13.31	1.44	-41.19	-13.00	28.19
7657.20	V	35.51	-53.85	13.31	1.44	-41.98	-13.00	28.98
556.40	H	39.71	-63.34	0.00	0.74	-64.08	-13.00	51.08
412.30	V	42.98	-65.08	0.00	0.62	-65.70	-13.00	52.70

LTE Band 26 (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: 814.7 MHz								
1629.40	H	51.06	-53.30	10.31	0.70	-43.69	-13.00	30.69
1629.40	V	48.31	-56.65	10.31	0.70	-47.04	-13.00	34.04
2444.10	H	40.81	-61.84	12.65	1.27	-50.46	-13.00	37.46
2444.10	V	44.44	-58.33	12.65	1.27	-46.95	-13.00	33.95
3258.80	H	37.45	-61.90	13.60	1.58	-49.88	-13.00	36.88
3258.80	V	37.21	-62.16	13.60	1.58	-50.14	-13.00	37.14
520.90	H	35.15	-68.64	0.00	0.72	-69.36	-13.00	56.36
336.70	V	43.29	-66.03	0.00	0.55	-66.58	-13.00	53.58
QPSK, Frequency: 831.5 MHz								
1663.00	H	51.14	-52.90	10.54	0.72	-43.08	-13.00	30.08
1663.00	V	48.55	-56.09	10.54	0.72	-46.27	-13.00	33.27
2494.50	H	40.83	-62.05	13.06	1.24	-50.23	-13.00	37.23
2494.50	V	44.72	-58.17	13.06	1.24	-46.35	-13.00	33.35
3326.00	H	37.55	-62.19	13.73	1.60	-50.06	-13.00	37.06
3326.00	V	37.44	-62.33	13.73	1.60	-50.20	-13.00	37.20
540.30	H	35.18	-68.20	0.00	0.73	-68.93	-13.00	55.93
590.80	V	43.32	-62.24	0.00	0.76	-63.00	-13.00	50.00
QPSK, Frequency: 848.3 MHz								
1696.60	H	51.01	-52.70	10.78	0.75	-42.67	-13.00	29.67
1696.60	V	48.29	-56.02	10.78	0.75	-45.99	-13.00	32.99
2544.90	H	40.79	-62.16	13.14	1.27	-50.29	-13.00	37.29
2544.90	V	44.59	-58.49	13.14	1.27	-46.62	-13.00	33.62
3393.20	H	37.47	-62.06	14.07	1.64	-49.63	-13.00	36.63
3393.20	V	37.33	-62.29	14.07	1.64	-49.86	-13.00	36.86
428.60	H	35.10	-69.54	0.00	0.64	-70.18	-13.00	57.18
126.30	V	43.05	-68.15	0.00	0.32	-68.47	-13.00	55.47

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 & §90.691 - BAND EDGES

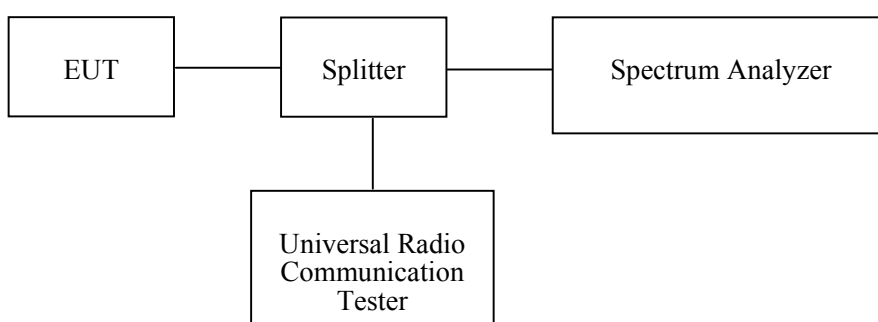
Applicable Standard

FCC § 2.1053, §22.917, § 24.238 and § 27.53, § 90.691;

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	FSU 26	200256	2020-05-09	2021-05-09
yzjingcheng	Coaxial Cable	KTRFBU-141-50	41005011	Each time	/
yzjingcheng	Coaxial Cable	KTRFBU-141-50	41002201	Each Time	/
E-Microwave	Two-way Splitter	ODP-1-6-2S	OE0120142	Each Time	/

* **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:	27.1 °C~ 30 °C
Relative Humidity:	54%~74 %
ATM Pressure:	99.8kPa ~100.8kPa
Tester:	Chirs Mo
Test Date:	2020-08-22~2020-08-24

Test Mode: Transmitting

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