TEST REPORT

APPLICANT	:	BLU Products, Inc.
PRODUCT NAME	:	Smart Phone
MODEL NAME	:	G71
BRAND NAME	:	BLU
FCC ID	:	YHLBLUG71
STANDARD(S)	:	47 CFR Part 22 Subpart H 47 CFR Part 24 Subpart E 47 CFR Part 27 Subpart L
RECEIPT DATE	:	2020-12-11
TEST DATE	:	2020-12-24 to 2021-02-04
ISSUE DATE	:	2021-02-04

Edited by: Peng Mi (Rapporteur)

Approved by: Peng Huarui (Supervisor)

DIRECTORY

Change History		
Version	Date	Reason for change
1.0	2021-02-04	First edition

1. Technical Information

Note: Provide by applicant.

1.1. Applicant and Manufacturer Information

Applicant:	BLU Products, Inc.
Applicant Address:	10814 NW 33rd St # 100 Doral, FL 33172,USA
Manufacturer:	BLU Products, Inc.
Manufacturer Address:	10814 NW 33rd St # 100 Doral, FL 33172,USA

1.2. Equipment Under Test (EUT) Description

Product Name:	Smart Phone	
Serial No.:	(N/A, marked #1 by test site)	
Hardware Version:	V1.0	
Software Version:	BLU_G0430WW_V10.0.01.01_GENERIC 27-11-2020 14:31	
Modulation Type:	GSM/GPRS Mode with GMSK Modulation EDGE Mode with 8PSK Modulation WCDMA Mode with QPSK Modulation HSDPA Mode with QPSK Modulation HSUPA Mode with QPSK Modulation HSPA+ Mode with 16QAM Modulation	
Operating Frequency Range:	GSM 850MHz	Tx: 824MHz-849MHz
		Rx: 869MHz-894MHz
	GSM 1900MHz	Tx: 1850MHz-1910MHz
		Rx: 1930MHz-1990MHz
	WCDMA Band V	Tx: 824MHz-849MHz
		Rx: 869MHz-894MHz
	WCDMA Band IV	Tx: 1710MHz-1755MHz
		Rx: 2110MHz-2155MHz
	WCDMA Band II	Tx: 1850MHz-1910MHz
		Rx: 1930MHz-1990MHz
Antenna Type:	Fixed Internal Antenna	
Antenna Gain:	GSM 850:	-4.5dBi
	GSM1900:	-2.7dBi

Antenna Gain:	WCDMA Band V:	-4.5dBi
	WCDMA Band IV:	-2.5dBi
	WCDMA Band II:	-2.7dBi
Accessory Information:	Battery	
	Brand Name:	BLU
	Model No.:	C976447500L
	Serial No.:	(N/A, marked #1 by test site)
	Capacity:	5000mAh
	Rated Voltage:	3.85V
	Charge Limit:	4.40V
	Manufacturer:	Zhongshan TianMao Battery Co., LTD
	AC Adapter	
	Brand Name:	BLU
	Model No.:	US-CR-2000
	Serial No.:	(N/A, marked #1 by test site)
	Rated Output:	5V⎓2000mA
	Rated Input:	100-240V~50/60Hz, 0.3A
	Manufacturer:	BJD GROUP CO,. LIMITED

Note 1: SIM 1 and SIM 2 is a chipset unit and tested as a single chipset. The SIM 1 is chosen for test.

Note 2: The transmitter (Tx) frequency arrangement of the Cellular 850MHz band used by the EUT can be represented with the formula F(n)=824.2+0.2*(n-128), 128<=n<=251; the lowest, middle, highest channel numbers (ARFCHs) used and tested in this report are separately 128 (824.2MHz), 190 (836.4MHz) and 251 (848.8MHz).

Note 3: The transmitter (Tx) frequency arrangement of the PCS 1900MHz band used by the EUT can be represented with the formula F(n)=1850.2+0.2*(n-512), 512<=n<=810; the lowest, middle and highest channel numbers (ARFCHs) used and tested in this report are separately 512 (1850.2MHz), 661 (1880.0MHz) and 810 (1909.8MHz).

Note 4: The transmitter (Tx) frequency arrangement of the WCDMA Band V used by the EUT can be represented with the formula F(n)=826.4+0.2*(n-4132), 4132<=n<=4233; the lowest, middle and highest channel numbers (ARFCHs) used and tested in this report are separately 4132 (826.4MHz), 4182(836.4MHz) and 4233 (846.6MHz).

Note 5: The transmitter (Tx) frequency arrangement of the WCDMA IV band used by the EUT can be represented with the formula F(n)=1712.4+0.2*(n-1312), 1312<=n<=1513; the lowest, middle and highest channel numbers (ARFCHs) used and tested in this report are separately 1312 (1712.4MHz), 1413 (1732.6MHz) and 1513 (1752.6MHz).

Note 6: The transmitter (Tx) frequency arrangement of the WCDMA Band II used by the EUT can be represented with the formula F(n)=1852.4+0.2*(n-9262), 9262<=n<=9538; the lowest,

middle and highest channel numbers (ARFCHs) used and tested in this report are separately 9262 (1852.4MHz), 9400 (1880MHz) and 9538 (1907.6MHz).

Note 7: All test modes and data rates were considered and evaluated respectively by performing full test. Test modes are chosen to be reported as the worst case below:
GSM mode and EDGE mode for GSM 850;
GSM mode and EDGE mode for GSM 1900;
WCDMA mode for WCDMA band V;
WCDMA mode for WCDMA band IV;
WCDMA mode for WCDMA band II;

Note 8: For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.

1.3. Maximum E.R.P./E.I.R.P. and Emission Designator

Test Mode	Maximum E.R.P./E.I.R.P. (W)	Emission Designator
GSM850(GSM)	0.314	244KGXW
GSM850(EDGE)	0.104	246KG7W
GSM1900(GSM)	0.379	246KGXW
GSM1900(EDGE)	0.203	243KG7W
WCDMA Band V	0.037	4M18F9W
WCDMA Band IV	0.091	4M18F9W
WCDMA Band II	0.079	4M19F9W

1.4. Test Standards and Results

The objective of the report is to perform testing according to 47 CFR Part 2, Part 22, Part 24 and Part 27 for the EUT FCC ID Certification:

No.	Identity	Document Title
1	47 CFR Part 2 (10-1-12 Edition)	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations
2	47 CFR Part 22 (10-1-12 Edition)	Public Mobile Services
3	47 CFR Part 24 (10-1-12 Edition)	Personal Communications Services
4	47 CFR Part 27 (10-1-12 Edition)	Miscellaneous Wireless Communications Services

Test detailed items/section required by FCC rules and results are as below:

No.	Section	Description	Test Date	Test Engineer	Result	Method determination/ Remark
1	2.1046	Conducted RF Output Power	Feb 04, 2021	Chen Hao Zhou Xiaolong	PASS	No deviation
2	24.232(d)	Peak -Average Ratio	Dec 24, 2020	Zhou Xiaolong	PASS	No deviation
3	2.1049	Occupied Bandwidth	Dec 24, 2020	Zhou Xiaolong	PASS	No deviation
4	2.1055, 22.355, 24.235, 27.54	Frequency Stability	Jan 29, 2021	Zhou Xiaolong	PASS	No deviation
5	2.1051, 22.917(a), 24.238(a), 27.53(h)	Conducted Out of Band Emissions	Dec 28, 2020	Zhou Xiaolong	PASS	No deviation
6	2.1051, 22.917(a), 24.238(a), 27.53(h)	Band Edge	Dec 24, 2020	Zhou Xiaolong	PASS	No deviation
7	22.913(a), 24.232(c) 27.50(d)	Transmitter Radiated Power (EIPR/E.R.P.)	Dec 27, 2020	Peng Xuewei	PASS	No deviation
8	2.1051,	Radiated Out	Dec 28, 2020	Peng Xuewei	PASS	No deviation

	22.917(a), 24.238(a), 27.53(h)	of Band Emissions				

Note 1: The tests were performed according to the method of measurements prescribed in KDB971168 D01 v03r01 and ANSI/TIA-603-E-2016.

Note 2: The path loss during the RF test is calibrated to correct the results by the offset setting in the test equipments. The ref offset 23.5dB contains two parts that cable loss 13 .5dB and Attenuator 10dB.

Note 3: Additions to, deviation, or exclusions from the method shall be judged in the "method determination" column of add, deviate or exclude from the specific method shall be explained in the "Remark" of the above table.

Note 4: When the test result is a critical value, we will use the measurement uncertainty give the judgment result based on the 95% risk level.

1.5. Environmental Conditions

During the measurement, the environmental conditions were within the listed ranges:

Temperature (°C):	15-35
Relative Humidity (%):	30-60
Atmospheric Pressure (kPa):	86-106

2. 47 CFR Part 2, Part 22H , 24E&27L Requirements

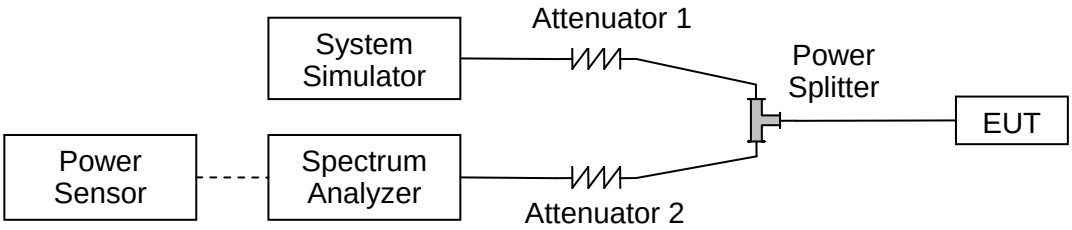
2.1. Conducted RF Output Power

2.1.1. Requirement

According to FCC section 2.1046(a), for transmitters other than single sideband, independent sideband and controlled carrier radiotelephone, power output shall be measured at the RF output terminals when the transmitter is adjusted in accordance with the tune-up procedure to give the values of current and voltage on the circuit elements specified in FCC section 2.1033(c)(8).

2.1.2. Test Description

Test Setup:



The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power i.e. Power Control Level (PCL) = 5 and Power Class = 4. A call is established between the EUT and the SS.

2.1.3. Test Results

GSM850	Average Power (dBm)		
TX Channel	**128**	**189**	**251**
Frequency (MHz)	**824.2**	**836.4**	**848.8**
GSM 1 Tx slot	31.61	31.58	31.57
GPRS 1 Tx slot	31.62	31.57	31.59
GPRS 2 Tx slots	31.21	31.20	31.18
GPRS 3 Tx slots	29.88	29.84	29.83
GPRS 4 Tx slots	28.69	28.73	28.71
EDGE 1 Tx slot	26.82	26.58	26.65
EDGE 2 Tx slots	25.18	25.44	25.50
EDGE 3 Tx slots	22.82	22.72	22.81
EDGE 4 Tx slots	21.73	21.82	21.85

GSM1900	Average Power (dBm)		
TX Channel	**512**	**661**	**810**
Frequency (MHz)	**1850.2**	**1880**	**1909.8**
GSM 1 Tx slot	28.48	28.41	28.38
GPRS 1 Tx slot	28.49	28.43	28.40
GPRS 2 Tx slots	28.18	28.16	28.17
GPRS 3 Tx slots	26.95	26.95	26.95
GPRS 4 Tx slots	25.82	25.85	25.88
EDGE 1 Tx slot	25.73	25.78	25.66
EDGE 2 Tx slots	24.38	24.55	24.64
EDGE 3 Tx slots	22.49	22.58	22.39
EDGE 4 Tx slots	21.49	21.35	21.35

WCDMA Band V	Average Power (dBm)		
TX Channel	**4132**	**4182**	**4233**
Frequency (MHz)	**826.4**	**836.4**	**846.6**
RMC 12.2Kbps	22.27	22.34	22.31
HSDPA Subtest-1	21.79	21.84	21.93
HSDPA Subtest-2	21.86	21.83	21.83
HSDPA Subtest-3	21.37	21.35	21.38
HSDPA Subtest-4	21.21	21.30	21.34
HSUPA Subtest-1	21.33	21.36	21.37
HSUPA Subtest-2	21.75	21.90	21.85
HSUPA Subtest-3	20.89	20.89	20.89
HSUPA Subtest-4	21.87	21.85	21.93
HSUPA Subtest-5	20.85	20.84	20.95

WCDMA Band IV	Average Power (dBm)		
TX Channel	**1312**	**1413**	**1513**
Frequency (MHz)	**1712.4**	**1732.6**	**1752.6**
RMC 12.2Kbps	22.07	21.89	21.99
HSDPA Subtest-1	21.80	21.83	21.58
HSDPA Subtest-2	21.86	21.72	21.49
HSDPA Subtest-3	21.44	21.25	21.18
HSDPA Subtest-4	21.42	21.33	21.09
HSUPA Subtest-1	21.47	21.40	21.17
HSUPA Subtest-2	21.95	21.81	21.61
HSUPA Subtest-3	21.02	20.79	20.66
HSUPA Subtest-4	21.96	21.73	21.56
HSUPA Subtest-5	21.03	20.73	20.60

WCDMA Band II	Average Power (dBm)		
TX Channel	**9262**	**9400**	**9538**
Frequency (MHz)	**1852.4**	**1880.0**	**1907.6**
RMC 12.2Kbps	21.61	21.68	21.55
HSDPA Subtest-1	20.13	20.06	19.99
HSDPA Subtest-2	20.03	19.98	19.88
HSDPA Subtest-3	19.55	19.49	19.51
HSDPA Subtest-4	19.46	19.45	19.38
HSUPA Subtest-1	19.53	19.54	19.43
HSUPA Subtest-2	20.03	19.98	19.91
HSUPA Subtest-3	19.06	19.08	18.96
HSUPA Subtest-4	20.04	19.93	19.94
HSUPA Subtest-5	18.92	19.01	19.07

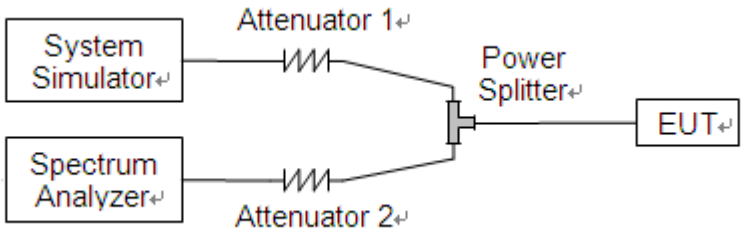
2.2. Peak to Average Ratio

2.2.1. Requirement

According to FCC 24.232(d) and 27.50(d), the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

2.2.2. Test Description

Test Setup:



The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power i.e. Power Control Level (PCL) = 5 and Power Class = 4. A call is established between the EUT and the SS.

2.2.3. Test procedure

1 .For GSM/EDGE operating mode:

a. Set RBW=1MHz, VBW=3MHz, peak detector in spectrum analyzer.
b. Set EUT in maximum output power, and triggered the bust signal.
c. Measured respectively the peak level and mean level, and the deviation was recorded as Peak to Average ratio.

2. For UMTS operating mode:

a. Set the CCDF (Complementary Cumulative Distribution Function) option in spectrum analyzer.
b. The highest RF powers were measured and recorded the maximum PAPR level associated with a probability of 0.1%.

2.2.4. Test Result

The lowest, middle and highest channels are selected to perform testing to verify the conducted RF output peak power of the Module.

A. Test Verdict:

GSM1900					
Mode	**Channel**	**Frequency (MHz)**	**Peak to Average ratio (dB)**	**Limit (dB)**	**Verdict**
GSM	512	1850.2	0.009	13	PASS
	661	1880.0	0.051		PASS
	810	1909.8	0.004		PASS
EDGE	512	1850.2	0.015		PASS
	661	1880.0	0.005		PASS
	810	1909.8	0.003		PASS

WCDMA Band IV					
Mode	**Channel**	**Frequency (MHz)**	**Peak to Average ratio (dB)**	**Limit (dB)**	**Verdict**
WCDMA	1312	1712.4	2.87	13	PASS
	1413	1732.6	2.89		PASS
	1513	1752.6	2.83		PASS

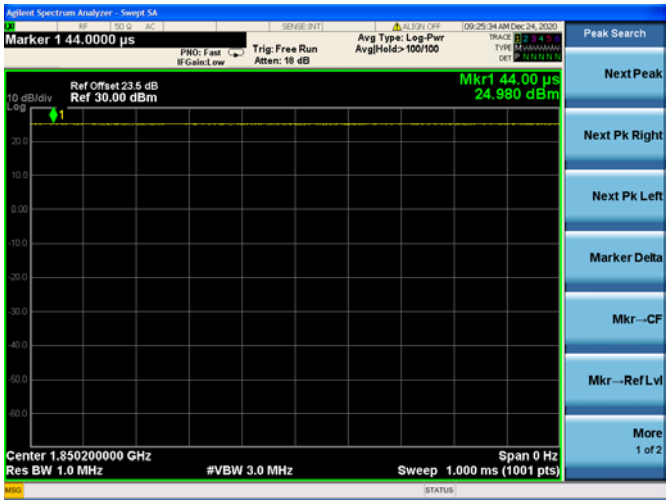
WCDMA Band II					
Mode	**Channel**	**Frequency (MHz)**	**Peak to Average ratio (dB)**	**Limit (dB)**	**Verdict**
WCDMA	9262	1852.4	2.67	13	PASS
	9400	1880.0	2.61		PASS
	9538	1907.6	2.62		PASS

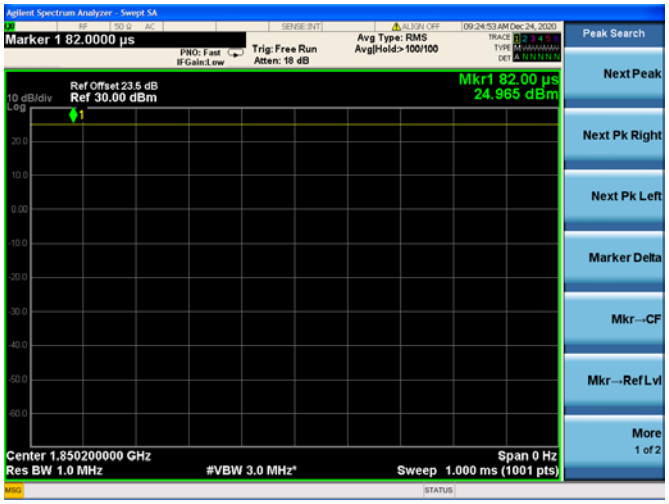
GSM1900(GSM), CH512, 1850.2MHz

GSM1900(GSM), CH661, 1880.0MHz

GSM1900(GSM), CH810, 1909.8MHz

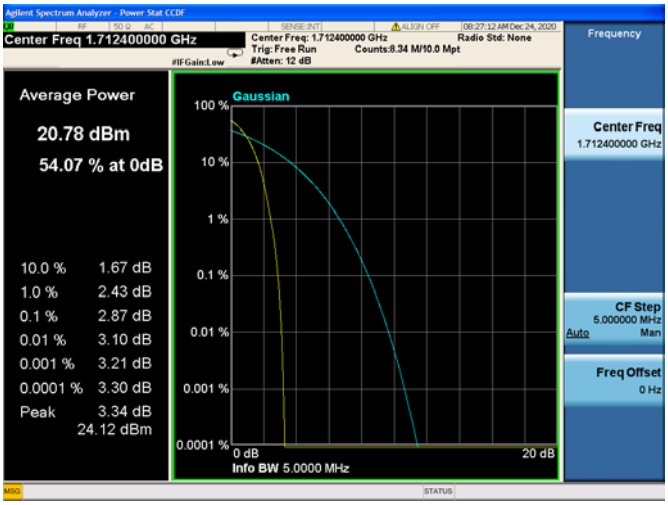
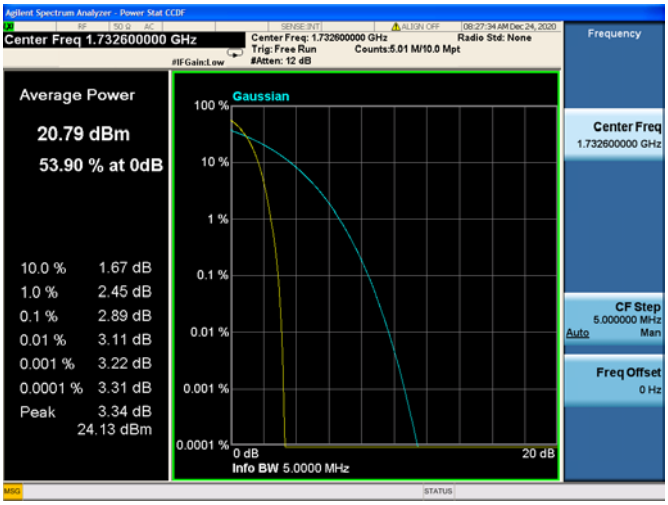
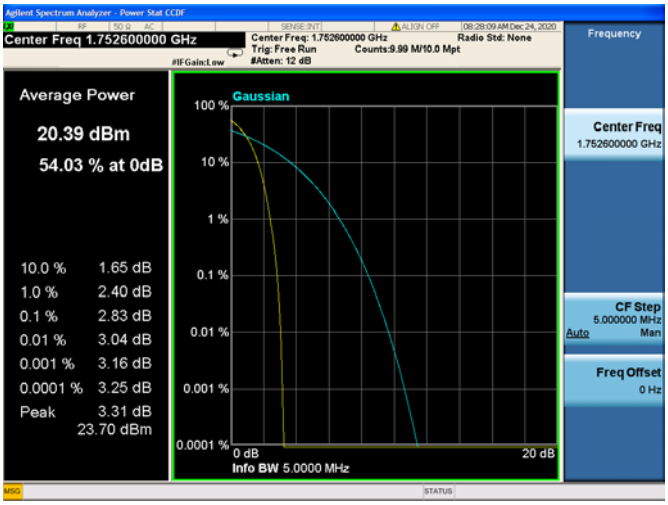
GSM1900(EDGE), CH512, 1850.2MHz

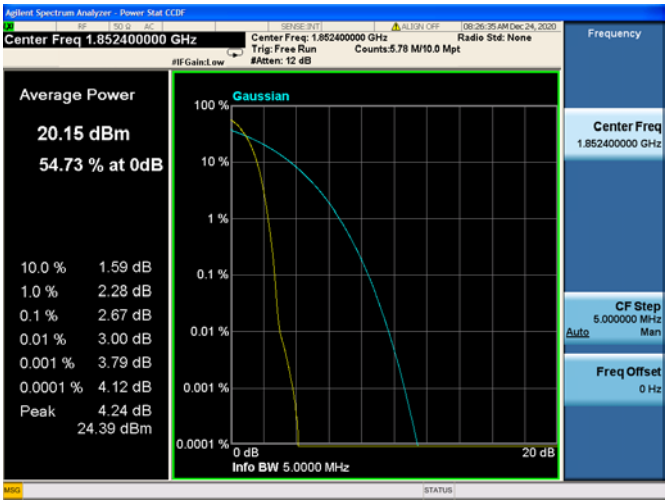
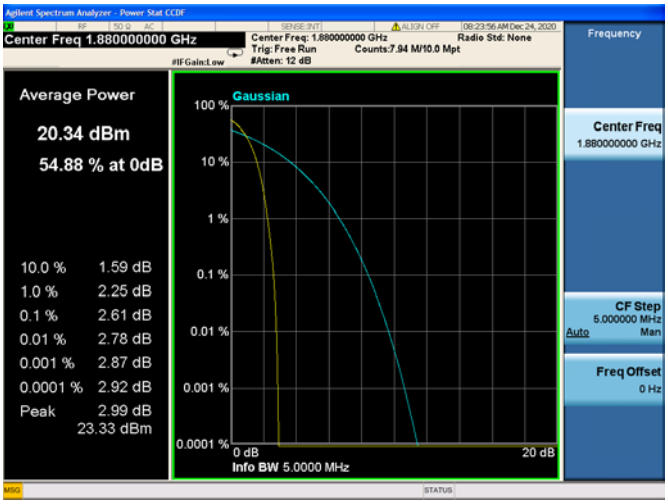
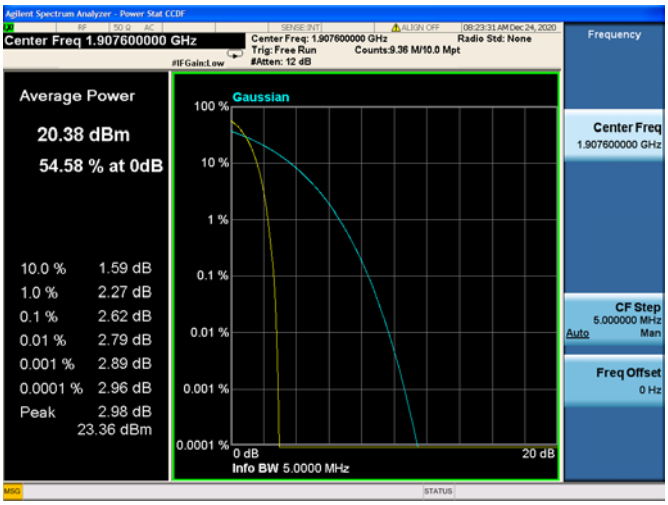




GSM1900(EDGE), CH661, 1880.0MHz

GSM1900(EDGE), CH810, 1909.8MHz

WCDMA Band IV, CH1312, 1712.4MHz	WCDMA Band IV, CH1413, 1732.6MHz
	
WCDMA Band IV, CH1513, 1752.6MHz	
	

WCDMA Band II, CH9262, 1852.4MHz	WCDMA Band II, CH9400, 1880.0MHz
	
WCDMA Band II, CH9538, 1907.6MHz	
	

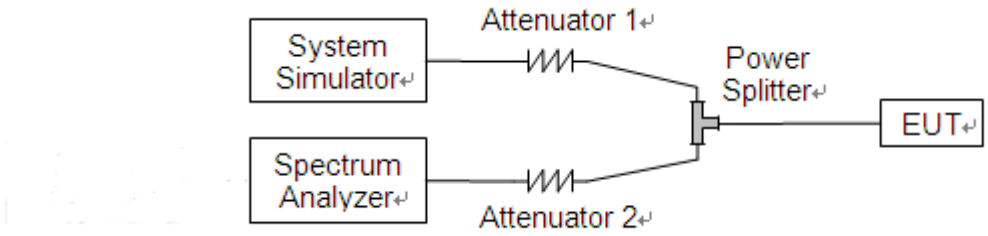
2.3. Occupied Bandwidth

2.3.1. Requirement

According to FCC section 2.1049, the occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission. Occupied bandwidth is also known as the 99% emission bandwidth.

2.3.2. Test Description

Test Setup:



The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power i.e. Power Control Level (PCL) = 5 and Power Class = 4. A call is established between the EUT and the SS.

2.3.3. Test Result

GSM850				
Mode	**Channel**	**Frequency (MHz)**	**99% Occupied Bandwidth (kHz)**	**26dB Bandwidth (kHz)**
GSM	128	824.2	244.30	312.4
	189	836.4	241.27	307.4
	251	848.8	244.00	321.5
EDGE	128	824.2	245.53	320.8
	189	836.4	242.98	312.6
	251	848.8	246.18	320.7

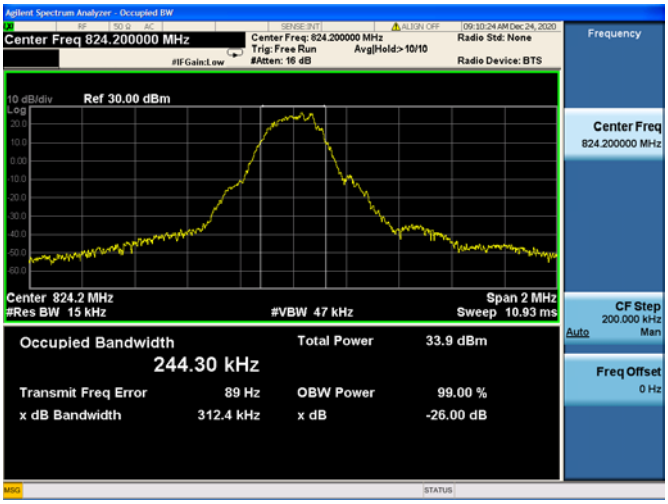
GSM1900				
Mode	**Channel**	**Frequency (MHz)**	**99% Occupied Bandwidth (kHz)**	**26dB Bandwidth (kHz)**
GSM	512	1850.2	244.75	319.6
	661	1880.0	246.24	319.9
	810	1909.8	244.91	322.2
EDGE	512	1850.2	241.28	316.5
	661	1880.0	243.49	315.4
	810	1909.8	242.95	320.8

WCDMA Band V				
Mode	**Channel**	**Frequency (MHz)**	**99% Occupied Bandwidth (MHz)**	**26dB Bandwidth (MHz)**
WCDMA	4132	826.4	4.18	4.72
	4182	836.4	4.15	4.71
	4233	846.6	4.18	4.73

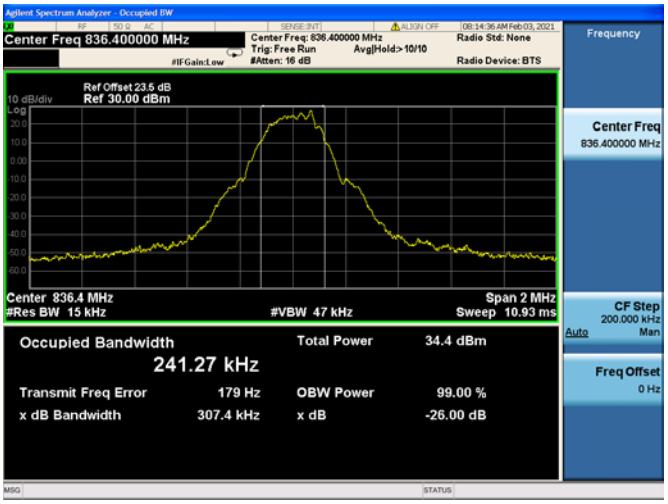
WCDMA Band IV				
Mode	**Channel**	**Frequency (MHz)**	**99% Occupied Bandwidth (MHz)**	**26dB Bandwidth (MHz)**
WCDMA	1312	1712.4	4.17	4.72
	1413	1732.6	4.17	4.73
	1513	1752.6	4.18	4.72

WCDMA Band II				
Mode	Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)
WCDMA	9262	1852.4	4.19	4.73
	9400	1880.0	4.18	4.72
	9538	1907.6	4.17	4.74

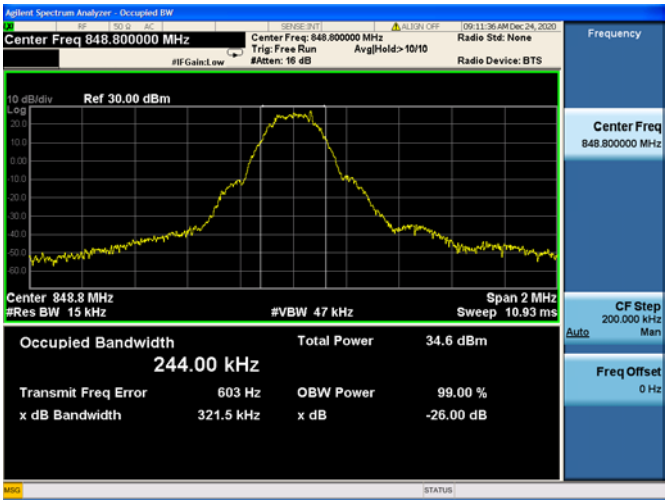
GSM850(GSM), CH128, 824.2MHz

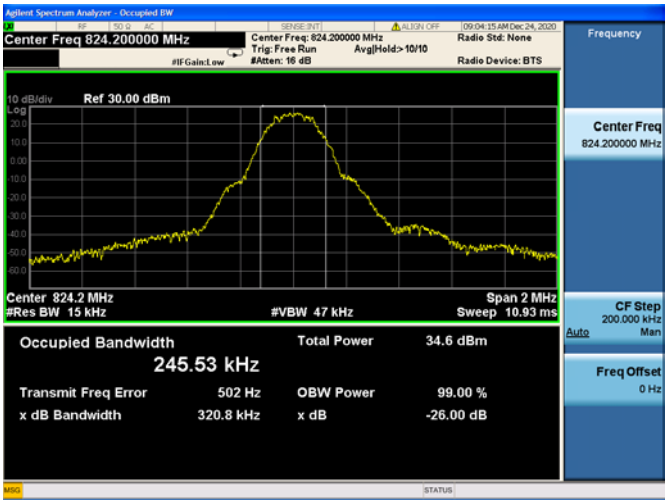
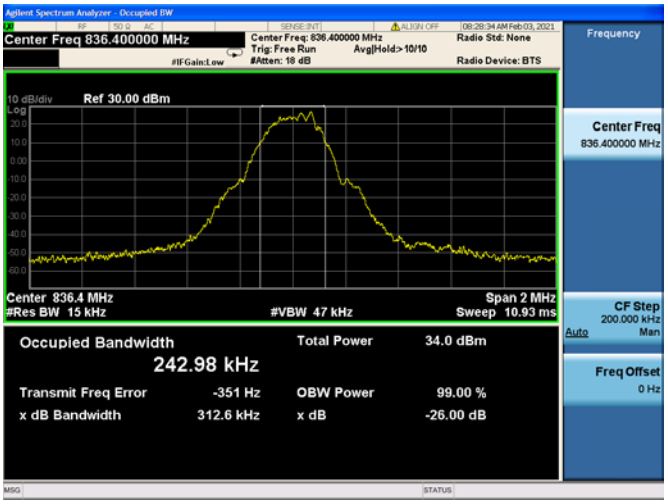
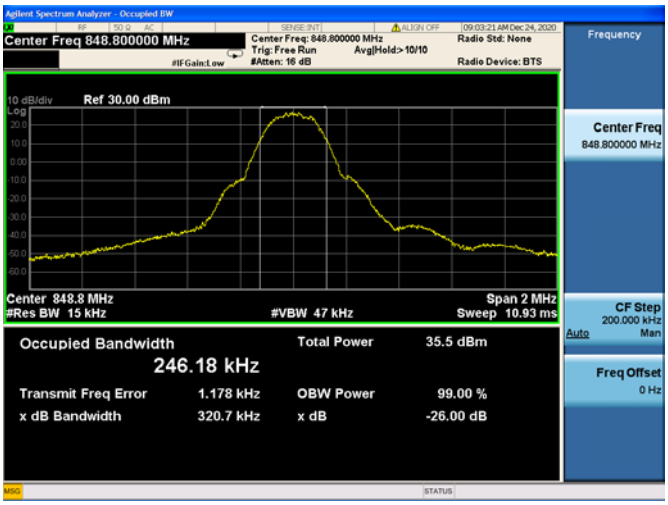


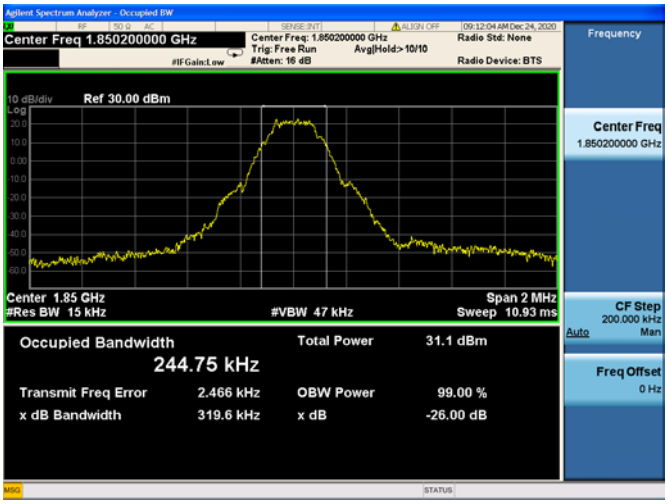
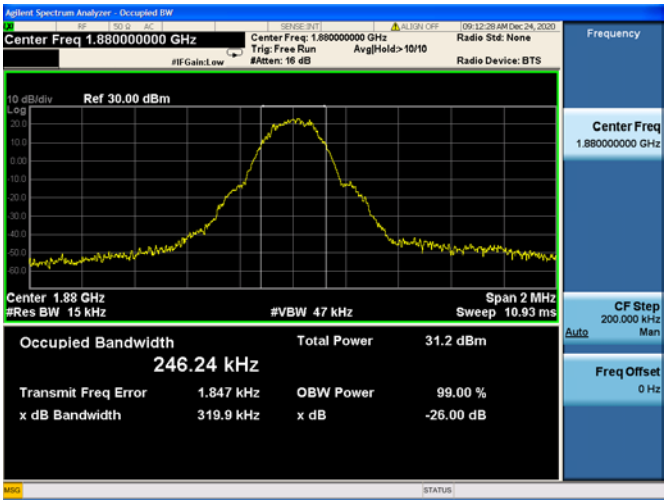
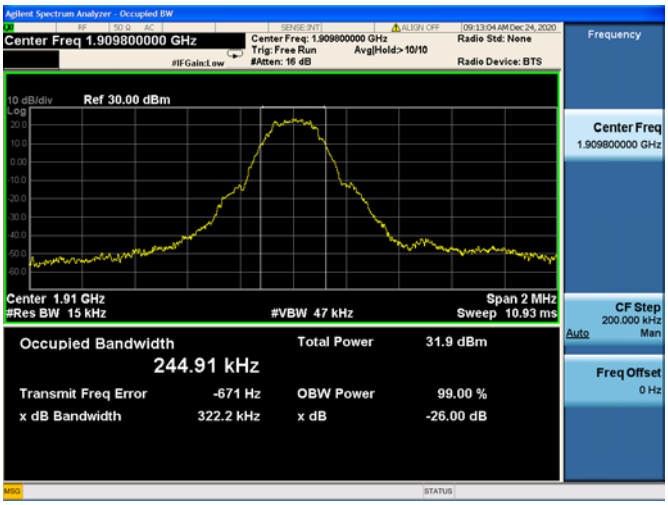
GSM850(GSM), CH189, 836.4MHz

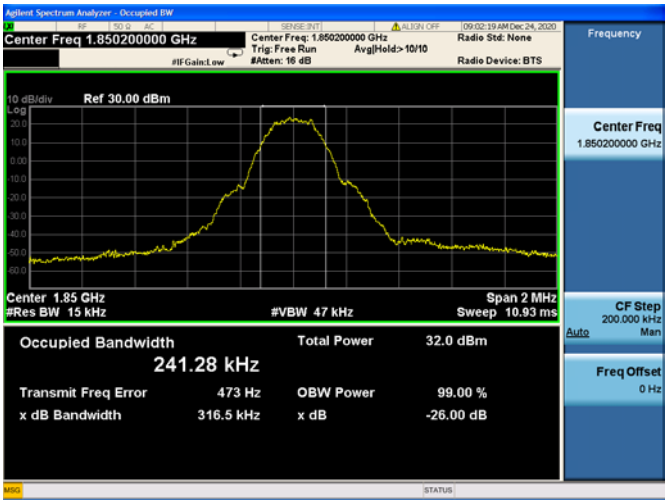
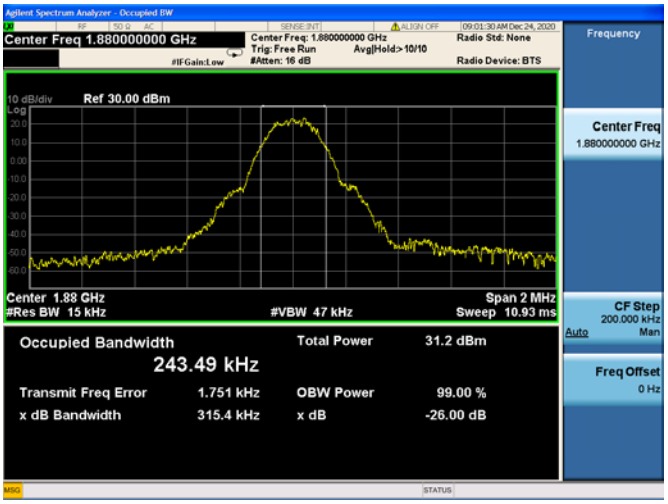
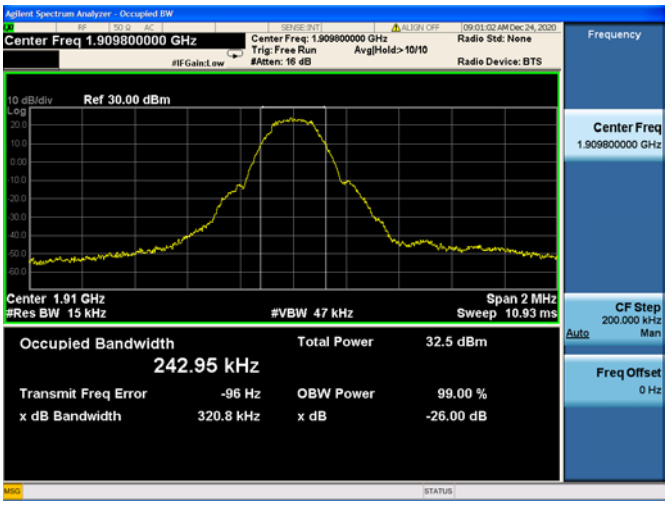


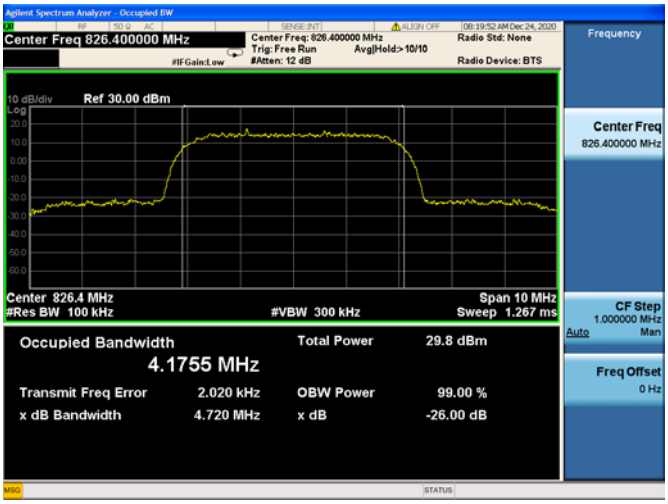
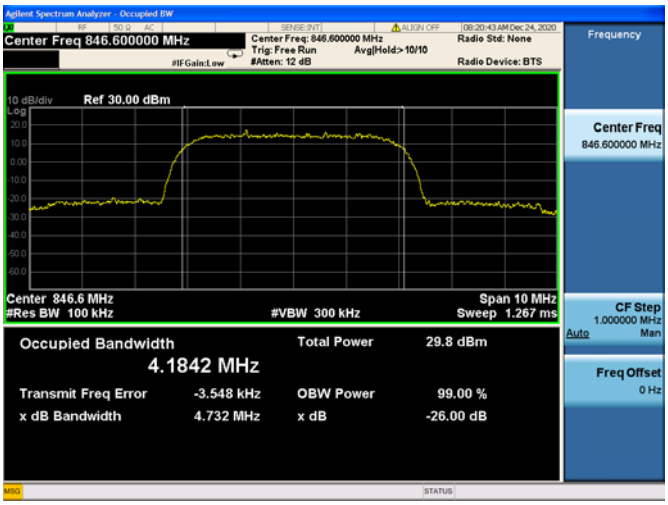
GSM850(GSM), CH251, 848.8MHz

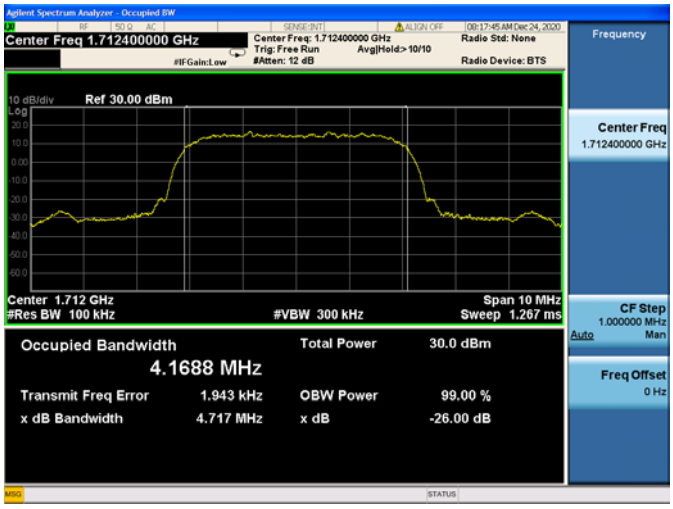
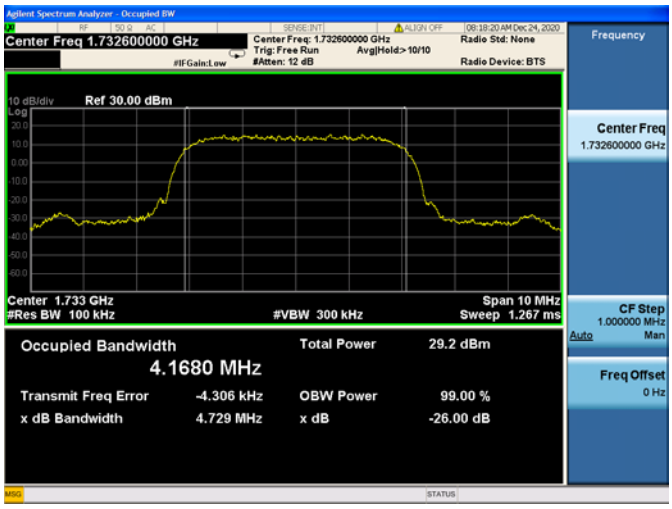


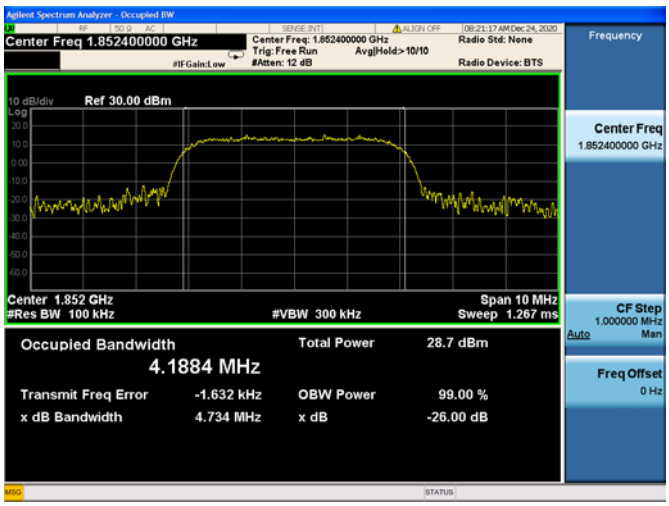
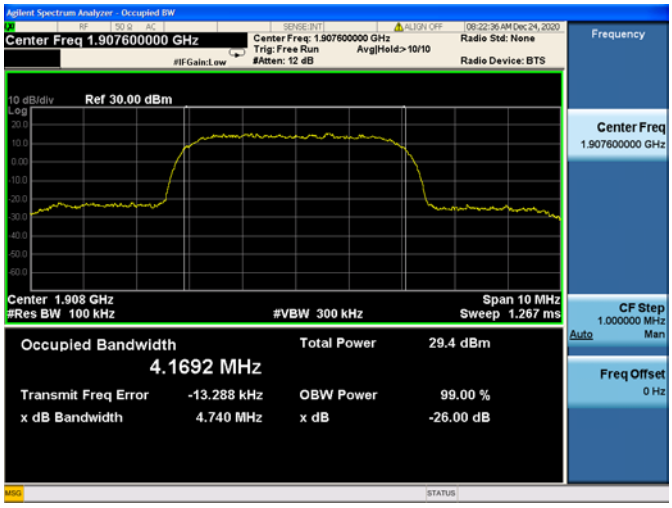
GSM850(EDGE), CH128, 824.2MHz	GSM850(EDGE), CH189, 836.4MHz
	
GSM850(EDGE), CH251, 848.8MHz	
	

GSM1900(GSM), CH512, 1850.2MHz	GSM1900(GSM), CH661, 1880.0MHz
	
GSM1900(GSM), CH810, 1909.8MHz	
	

GSM1900(EDGE), CH512, 1850.2MHz	GSM1900(EDGE), CH661, 1880.0MHz
	
GSM1900(EDGE), CH810, 1909.8MHz	
	

WCDMA Band V, CH4132, 826.4MHz	WCDMA Band V, CH4182, 836.4MHz
	
WCDMA Band V, CH4233, 846.6MHz	
	

WCDMA Band IV, CH1312, 1712.4MHz	WCDMA Band IV, CH1413, 1732.6MHz
	
WCDMA Band IV, CH1513, 1752.6MHz	
	

WCDMA Band II, CH9262, 1852.4MHz	WCDMA Band II, CH9400, 1880.0MHz
	
WCDMA Band II, CH9538, 1907.6MHz	
	

2.4. Frequency Stability

2.4.1. Requirement

According to FCC section 22.355, 24.235 and 27.54 the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. According to FCC section 2.1055, the test conditions are:

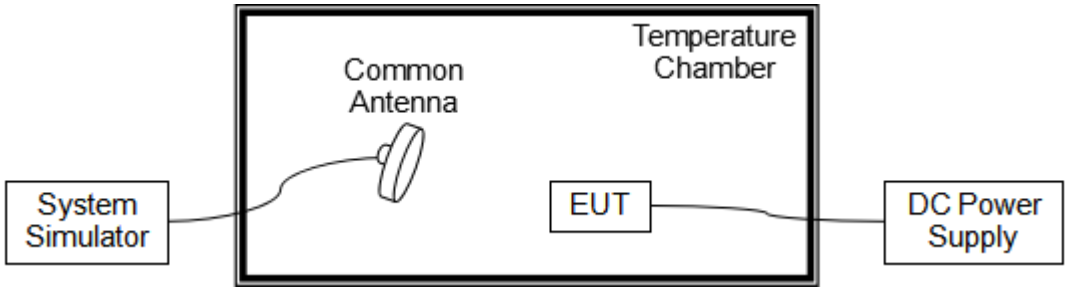
(a) The temperature is varied from-30°C to +50°C at intervals of not more than 10°C.

(b) For hand carried battery powered equipment, the primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacture. The supply voltage shall be measured at the input to the cable normally provided with the equipment, or at the power supply terminals if cables are not normally provided.

Note: The operating temperature of EUT is from -20°C to 50°C, which are specified by the applicant.

2.4.2. Test Description

Test Setup:



The EUT, which is powered by the DC Power Supply directly, is located in the Temperature Chamber. The EUT is commanded by the System Simulator (SS) to operate at the maximum output power i.e. Power Control Level (PCL) = 5 and Power Class = 4. A call is established between the EUT and the SS via a Common Antenna.

2.4.3. Test Result

The nominal, highest and lowest extreme voltages are separately 3.80V, 4.35V and 3.00V, which are specified by the applicant; the normal temperature here used is 20°C.

GSM850(GSM), CH189, 836.4MHz Limit =±2.5ppm					
Voltage (%)	**Power (VDC)**	**Temp (°C)**	**Fre. Dev. (Hz)**	**Deviation (ppm)**	**Result**
100	3.85	+20(Ref)	-18	-0.022	PASS
100		-20	14	0.017	
100		-10	-19	-0.023	
100		0	13	0.016	
100		+10	11	0.013	
100		+20	13	0.016	
100		+30	-17	-0.020	
100		+40	-11	-0.013	
100		+50	-13	-0.016	
115	4.40	+20	-17	-0.020	
85	3.30	+20	-18	-0.022	

GSM850(EDGE), CH189, 836.4MHz Limit =±2.5ppm					
Voltage (%)	**Power (VDC)**	**Temp (°C)**	**Fre. Dev. (Hz)**	**Deviation (ppm)**	**Result**
100	3.85	+20(Ref)	27	0.032	PASS
100		-20	30	0.036	
100		-10	15	0.018	
100		0	-12	-0.014	
100		+10	19	0.023	
100		+20	44	0.053	
100		+30	21	0.025	
100		+40	17	0.020	
100		+50	-20	-0.024	
115	4.40	+20	-17	-0.020	
85	3.30	+20	27	0.032	

GSM1900(GSM), CH661, 1880.0MHz Limit =Within Authorized Band					
Voltage (%)	**Power (VDC)**	**Temp (°C)**	**Fre. Dev. (Hz)**	**Deviation (ppm)**	**Result**
100	3.85	+20(Ref)	-15	-0.008	PASS
100		-20	35	0.019	
100		-10	-20	-0.011	
100		0	27	0.014	
100		+10	-14	-0.007	
100		+20	-17	-0.009	
100		+30	48	0.026	
100		+40	42	0.022	
100		+50	38	0.020	
115	4.40	+20	31	0.016	
85	3.30	+20	-15	-0.008	

GSM1900(EDGE), CH661, 1880.0MHz Limit =Within Authorized Band					
Voltage (%)	**Power (VDC)**	**Temp (°C)**	**Fre. Dev. (Hz)**	**Deviation (ppm)**	**Result**
100	3.85	+20(Ref)	-13	-0.007	PASS
100		-20	15	0.008	
100		-10	13	0.007	
100		0	-19	-0.010	
100		+10	-19	-0.010	
100		+20	13	0.007	
100		+30	16	0.009	
100		+40	16	0.009	
100		+50	-24	-0.013	
115	4.40	+20	20	0.011	
85	3.30	+20	-13	-0.007	

WCDMA Band V, CH4182, 836.4MHz Limit =±2.5ppm					
Voltage (%)	**Power (VDC)**	**Temp (°C)**	**Fre. Dev. (Hz)**	**Deviation (ppm)**	**Result**
100	3.80	+20(Ref)	-22	-0.026	PASS
100		-20	-6	-0.007	
100		-10	18	0.022	
100		0	-20	-0.024	
100		+10	20	0.024	
100		+20	23	0.027	
100		+30	17	0.020	
100		+40	-13	-0.016	
100		+50	-10	-0.012	
115	4.35	+20	-12	-0.014	
85	3.23	+20	-22	-0.026	

WCDMA Band IV, CH1413, 1732.6MHz Limit =Within Authorized Band					
Voltage (%)	**Power (VDC)**	**Temp (°C)**	**Fre. Dev. (Hz)**	**Deviation (ppm)**	**Result**
100	3.80	+20(Ref)	-16	-0.009	PASS
100		-20	17	0.010	
100		-10	16	0.009	
100		0	11	0.006	
100		+10	19	0.011	
100		+20	-12	-0.007	
100		+30	16	0.009	
100		+40	-12	-0.007	
100		+50	11	0.006	
115	4.35	+20	16	0.009	
85	3.23	+20	-16	-0.009	

WCDMA Band II, CH9400, 1880.0MHz Limit =Within Authorized Band					
Voltage (%)	**Power (VDC)**	**Temp (°C)**	**Fre. Dev. (Hz)**	**Deviation (ppm)**	**Result**
100	3.80	+20(Ref)	-12	-0.006	PASS
100		-20	25	0.013	
100		-10	17	0.009	
100		0	12	0.006	
100		+10	12	0.006	
100		+20	22	0.012	
100		+30	11	0.006	
100		+40	-18	-0.010	
100		+50	-13	-0.007	
115	4.35	+20	14	0.007	
85	3.23	+20	-12	-0.006	

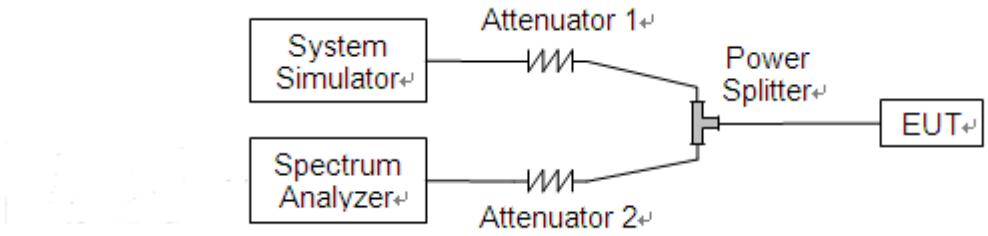
2.5. Conducted Out of Band Emissions

2.5.1. Requirement

According to FCC section 22.917(a), 24.238(a) and 27.53(h) the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43+10*log(P)dB. This calculated to be -13dBm. The measurement frequency range is from 30MHz to the 10th harmonic of the fundamental frequency.

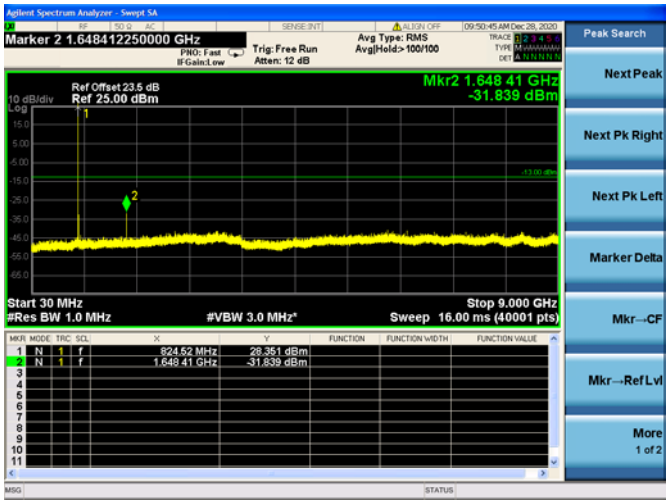
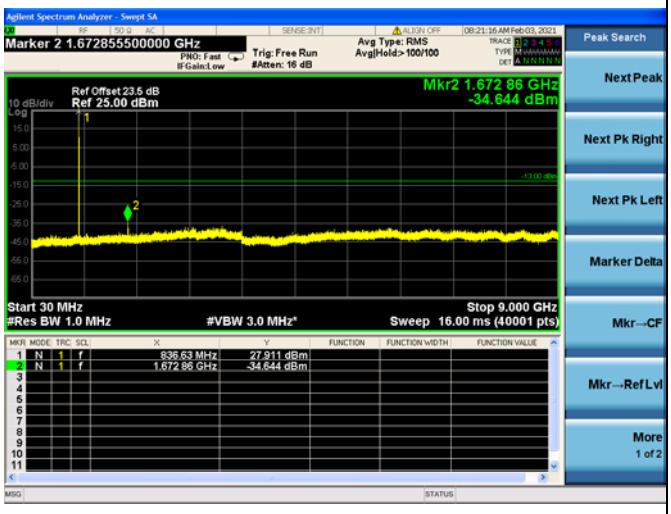
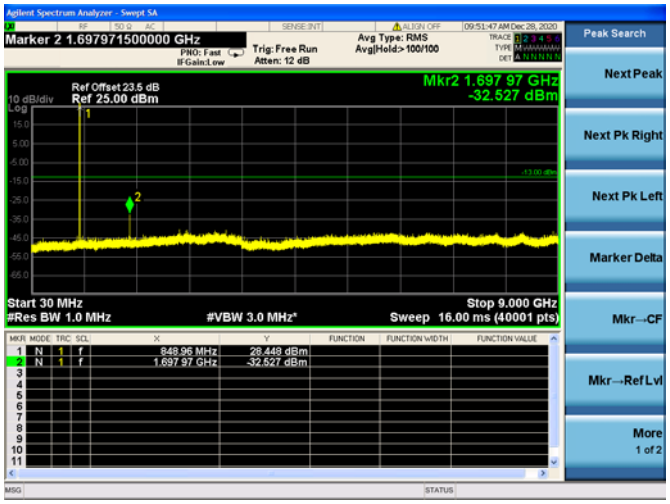
2.5.2. Test Description

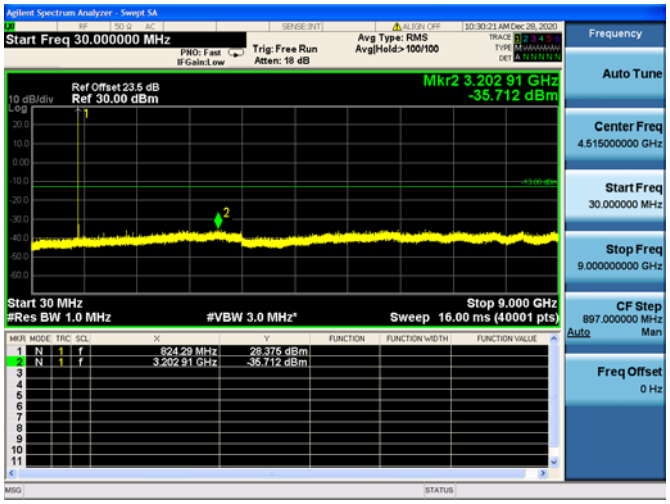
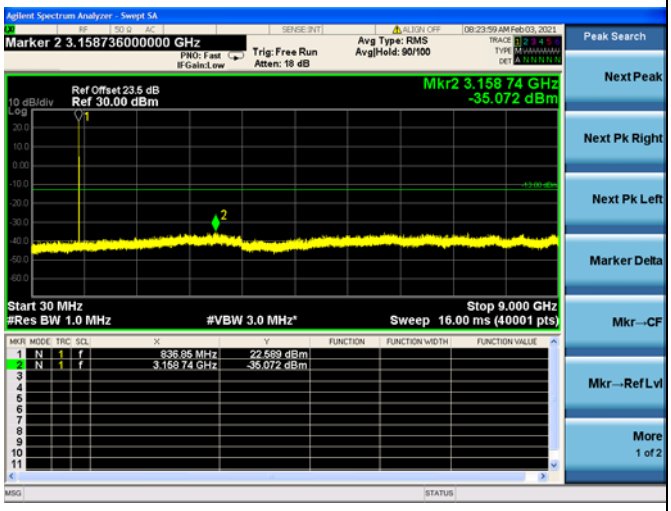
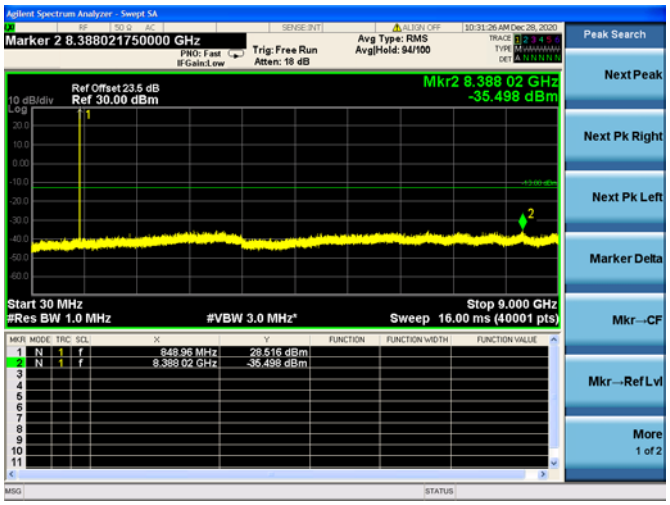
Test Setup:

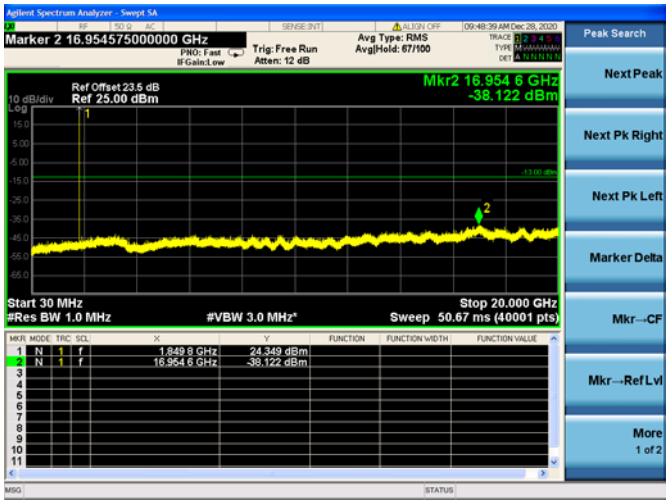
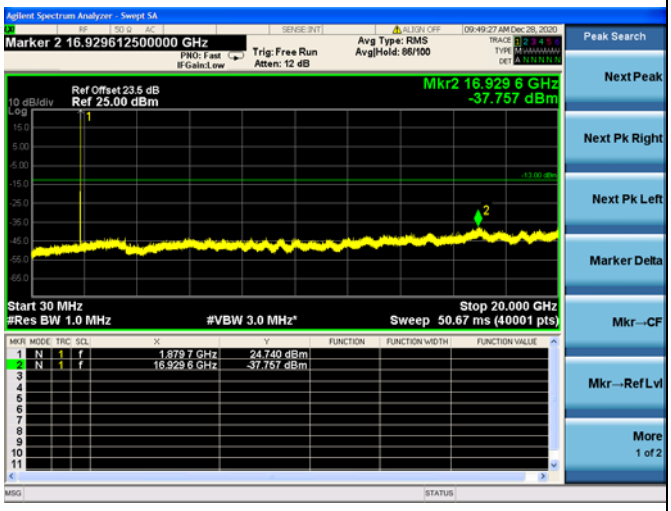
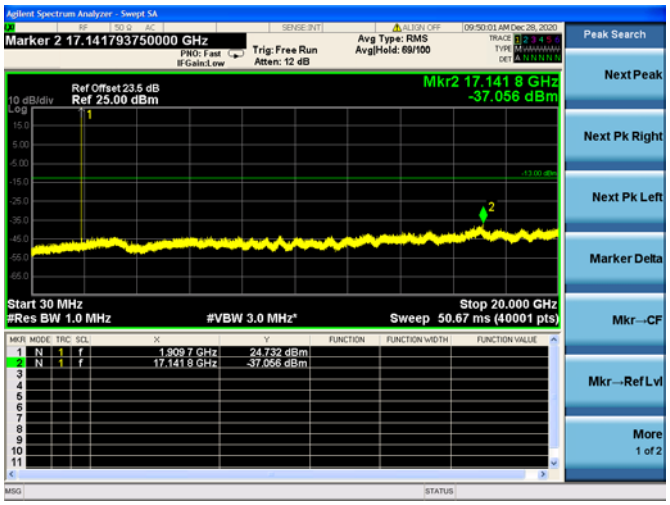


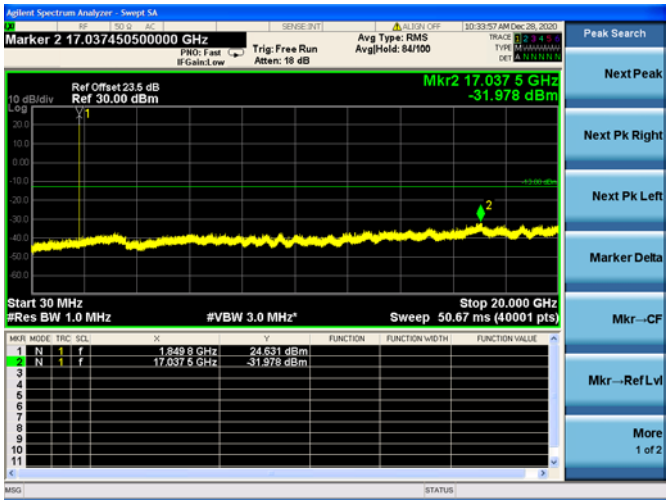
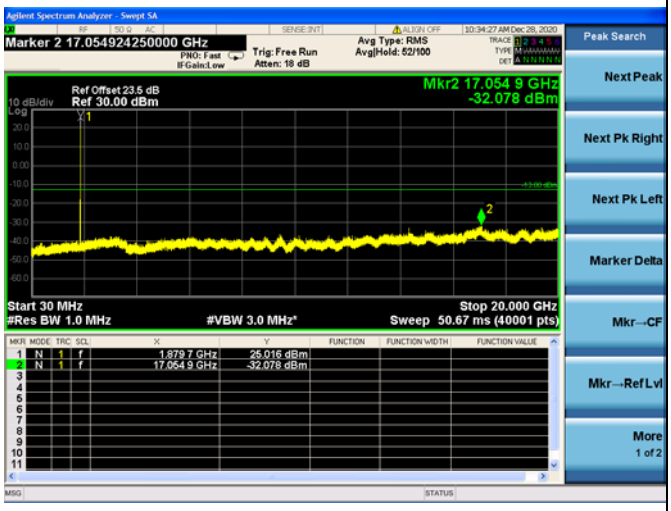
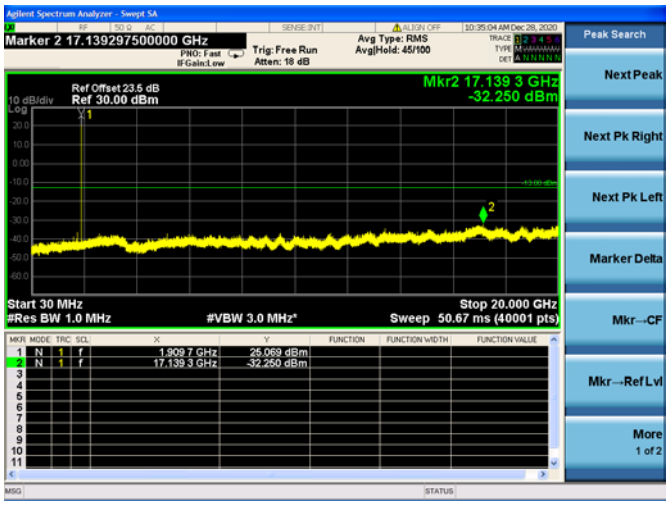
The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power i.e. Power Control Level (PCL) = 5 and Power Class = 4. A call is established between the EUT and the SS.

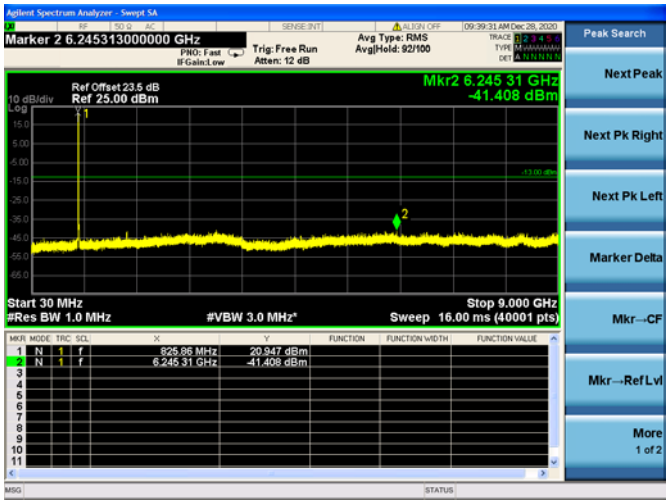
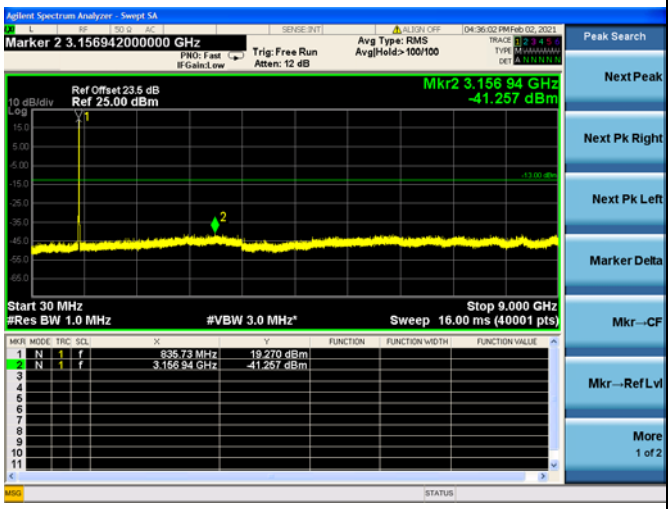
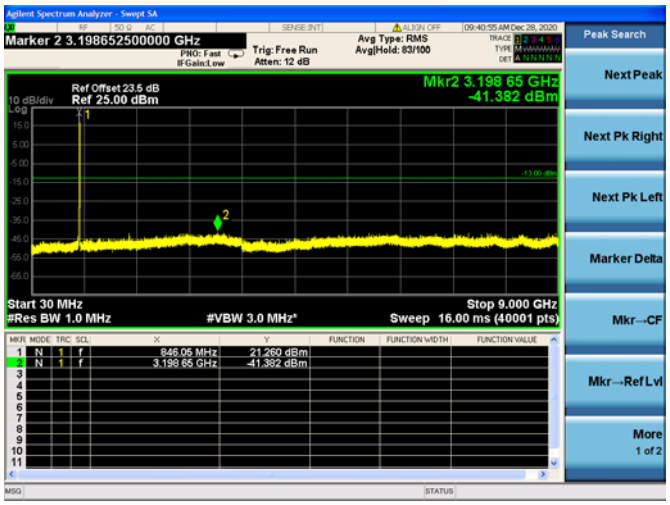
2.5.3. Test Result

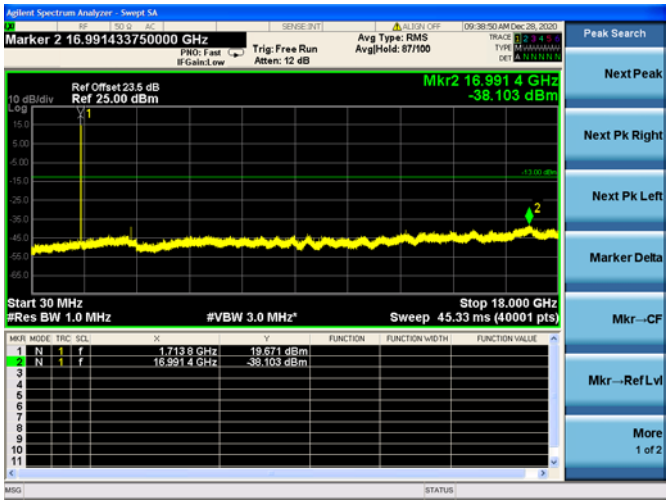
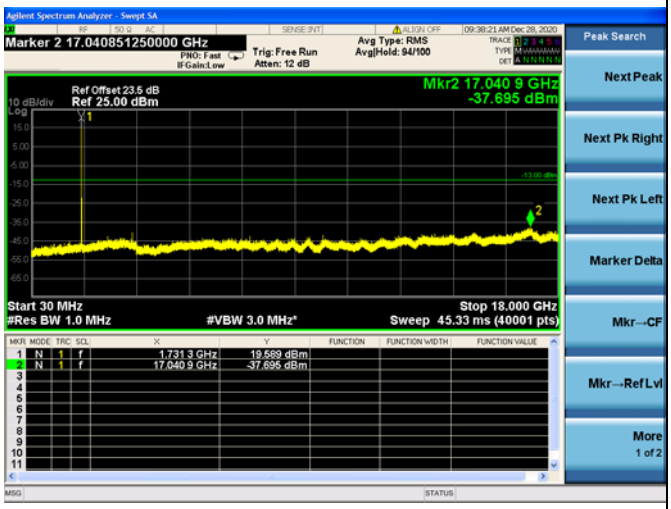
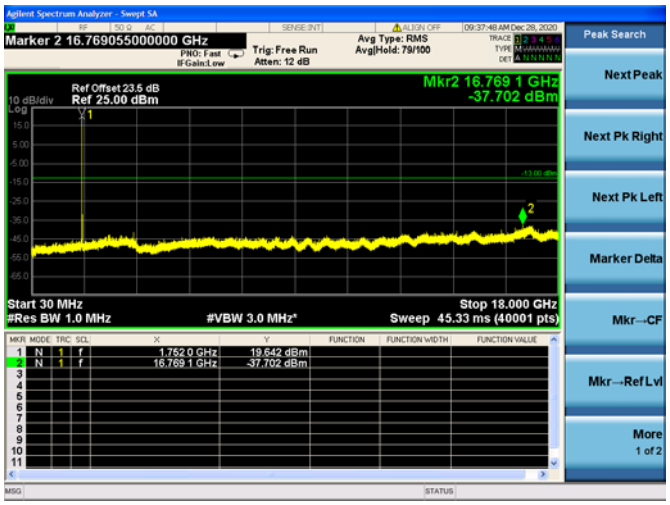
GSM850(GSM), CH128, 824.2MHz	GSM850(GSM), CH189, 836.4MHz
	
GSM850(GSM), CH251, 848.8MHz	
	

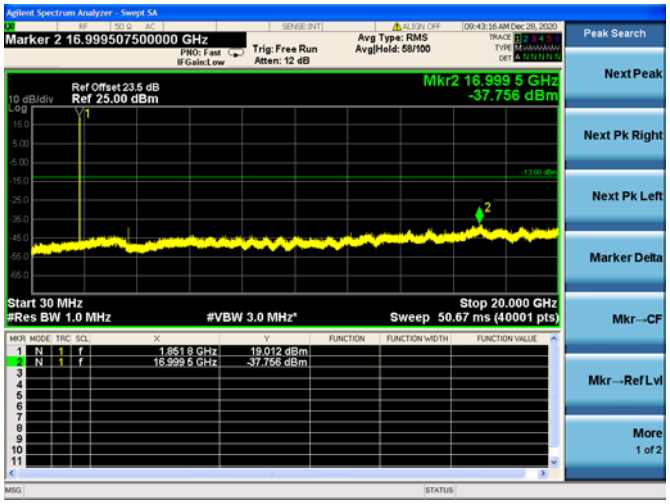
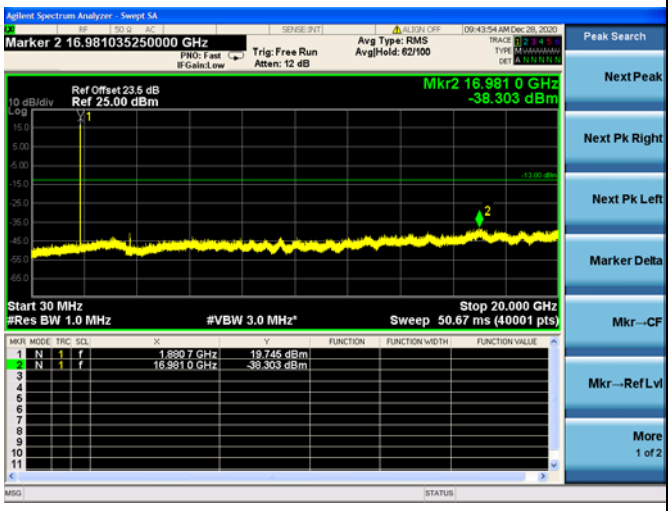
GSM850(EDGE), CH128, 824.2MHz	GSM850(EDGE), CH189, 836.4MHz
	
GSM850(EDGE), CH251, 848.8MHz	
	

GSM1900(GSM), CH512, 1850.2MHz	GSM1900(GSM), CH661, 1880.0MHz
	
GSM1900(GSM), CH810, 1909.8MHz	
	

GSM1900(EDGE), CH512, 1850.2MHz	GSM1900(EDGE), CH661, 1880.0MHz
	
GSM1900(EDGE), CH810, 1909.8MHz	
	

WCDMA Band V, CH4132, 826.4MHz	WCDMA Band V, CH4182, 836.4MHz
	
WCDMA Band V, CH4233, 846.6MHz	
	

WCDMA Band IV,CH1312, 1712.4MHz	WCDMA Band IV, CH1413, 1732.6MHz
	
WCDMA Band IV, CH1513, 1752.6MHz	
	

WCDMA Band II, CH9262, 1852.4MHz	WCDMA Band II, CH9400, 1880.0MHz
	
WCDMA Band II, CH9538, 1907.6MHz