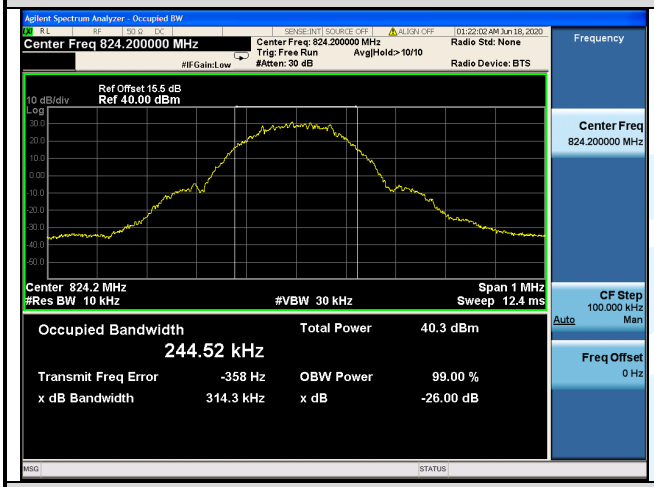
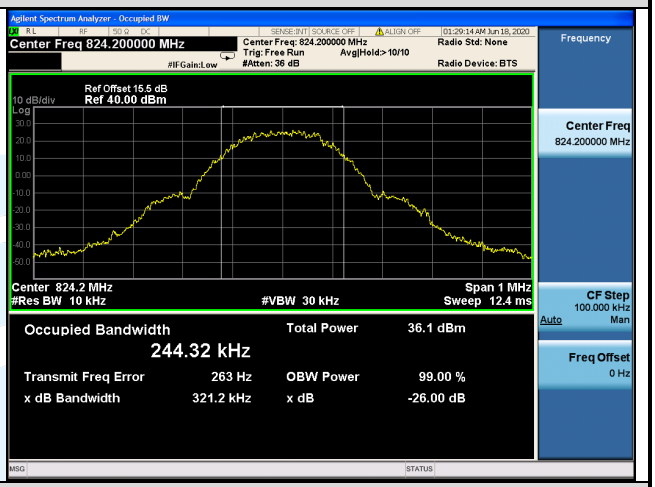
The test plots as follows:

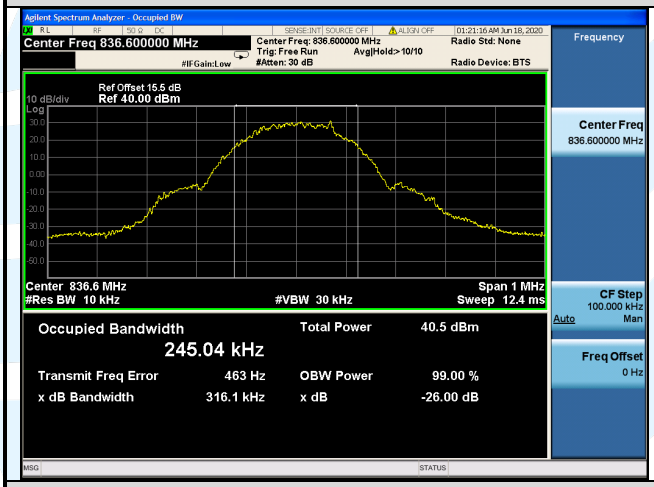
GSM 850	
GSM	EDGE

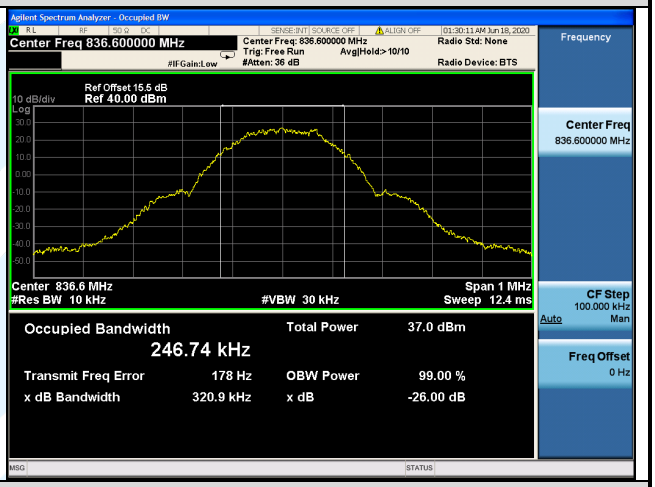
Lowest Channel



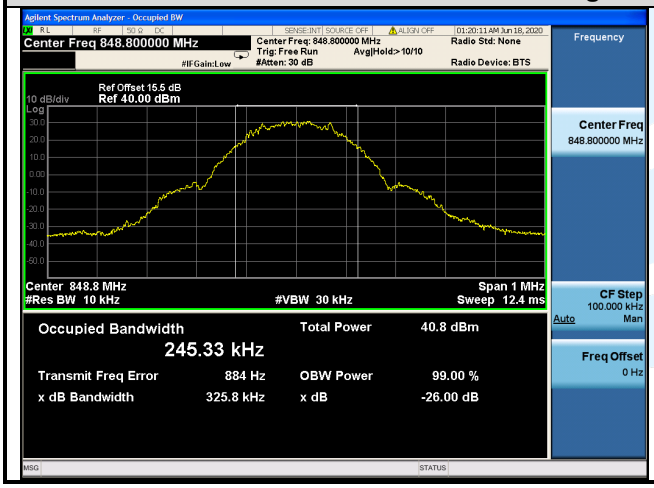


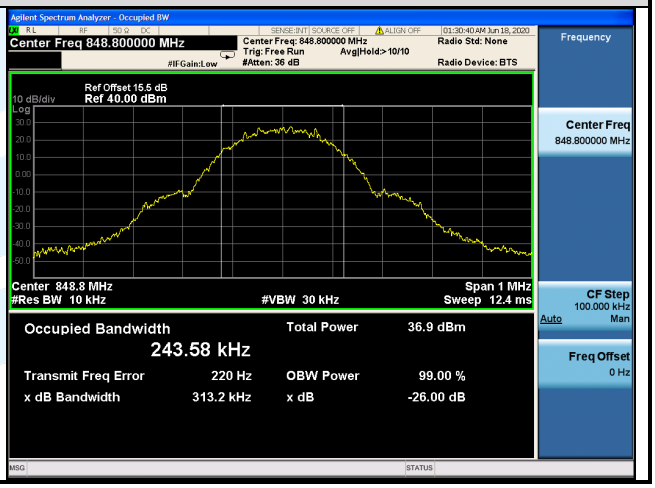
Middle Channel





Highest Channel

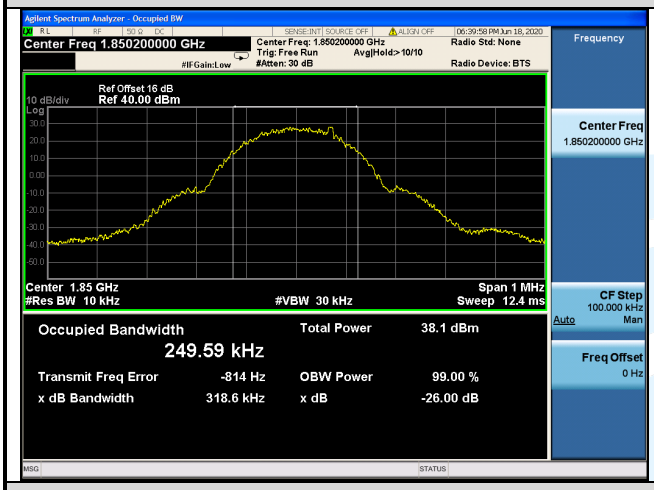


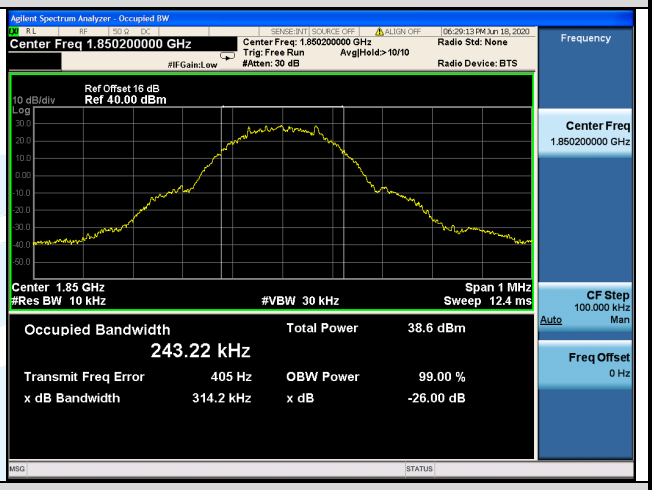


PCS 1900

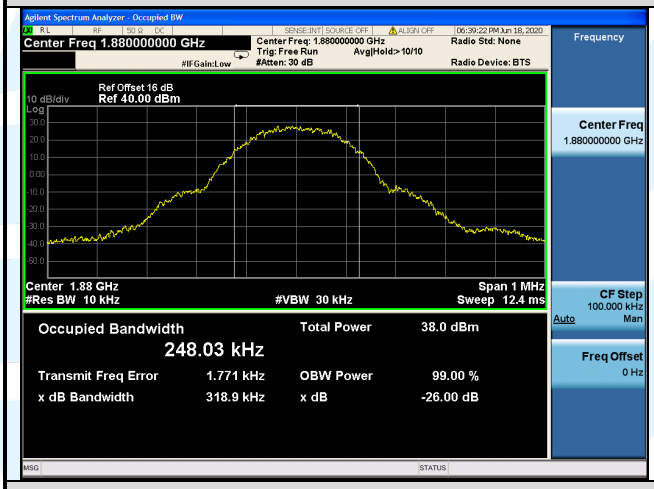
GSM	EDGE

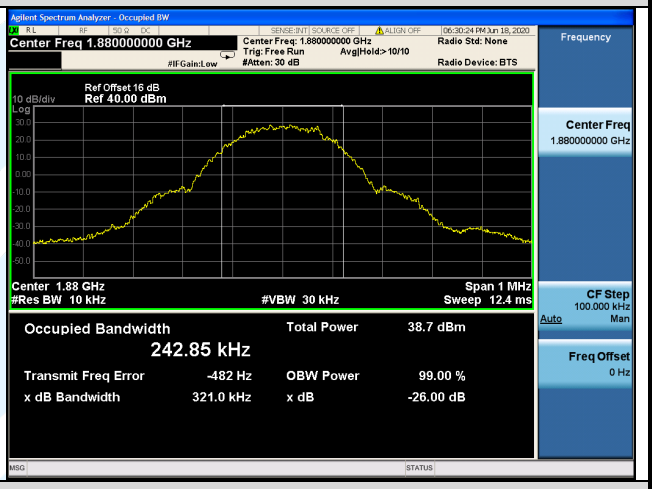
Lowest Channel



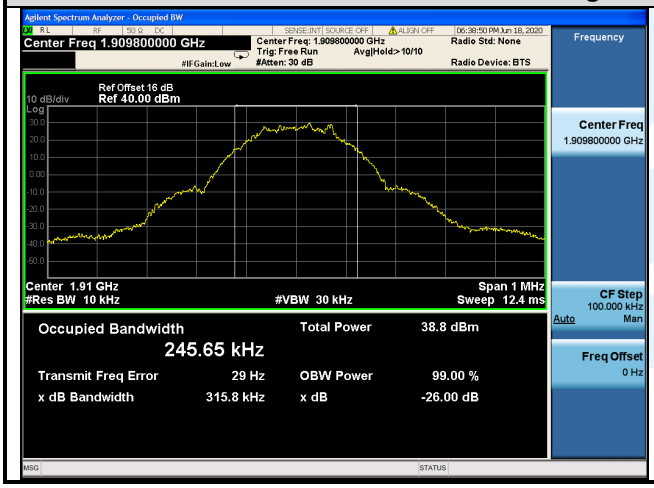


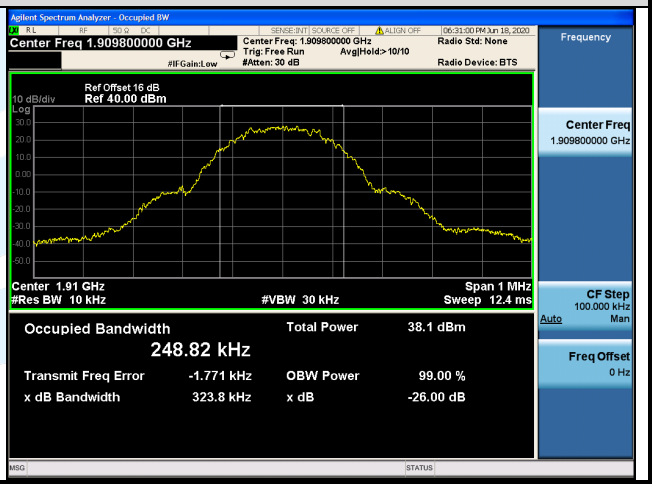
Middle Channel





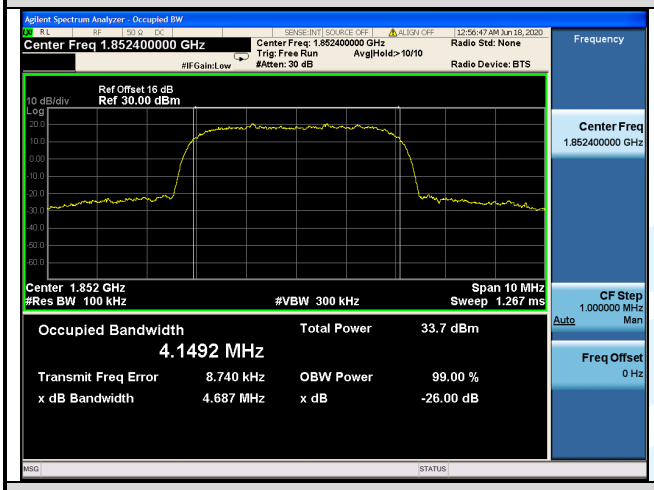
Highest Channel

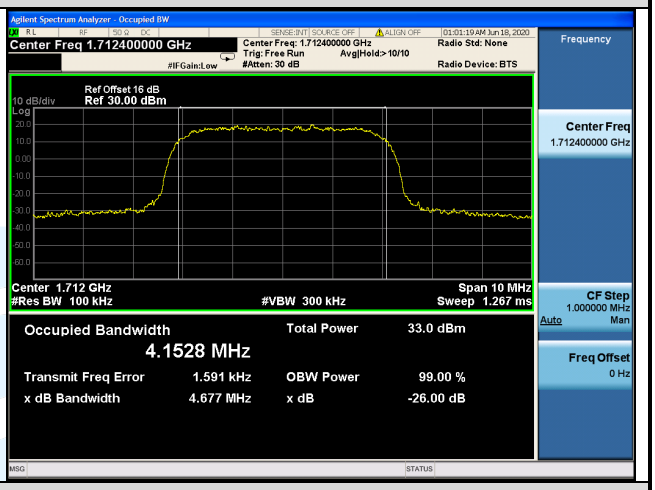




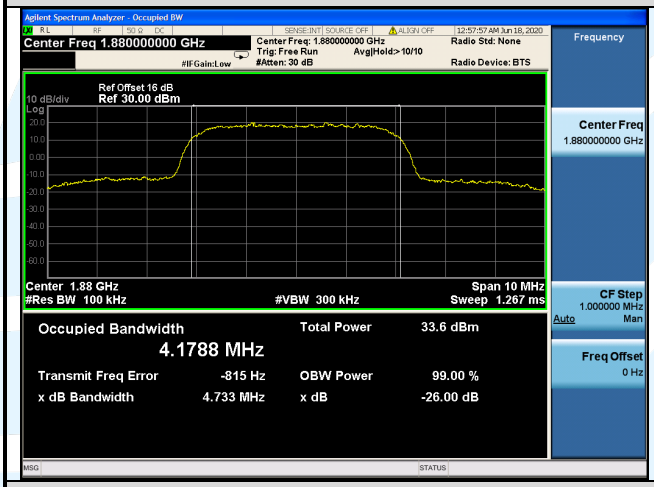
WCDMA Band II_RMC 12.2kbps	WCDMA Band IV_RMC 12.2kbps

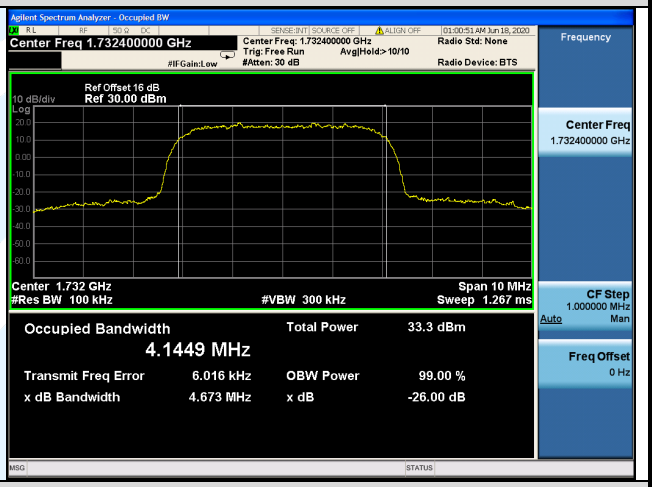
Lowest Channel



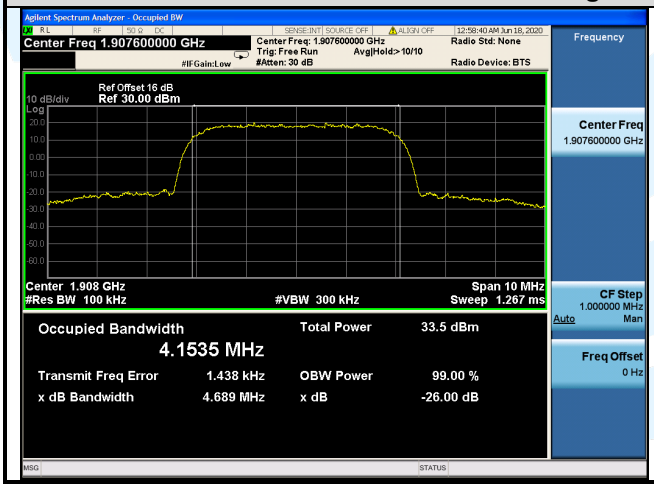


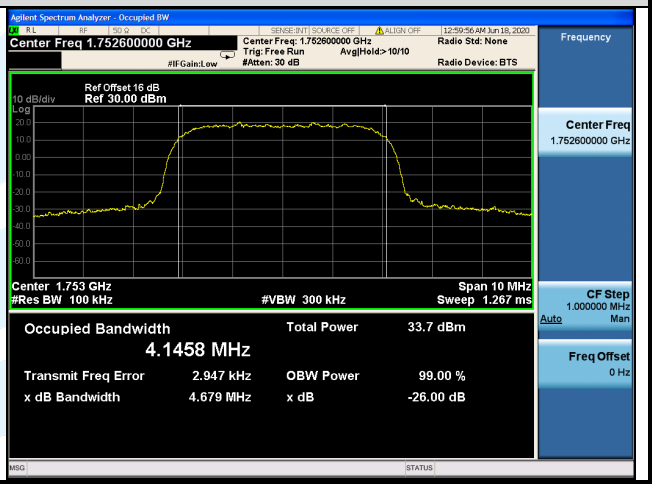
Middle Channel





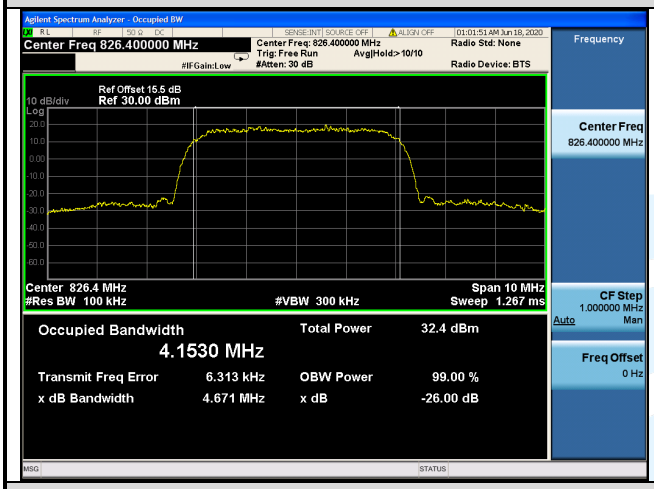
Highest Channel



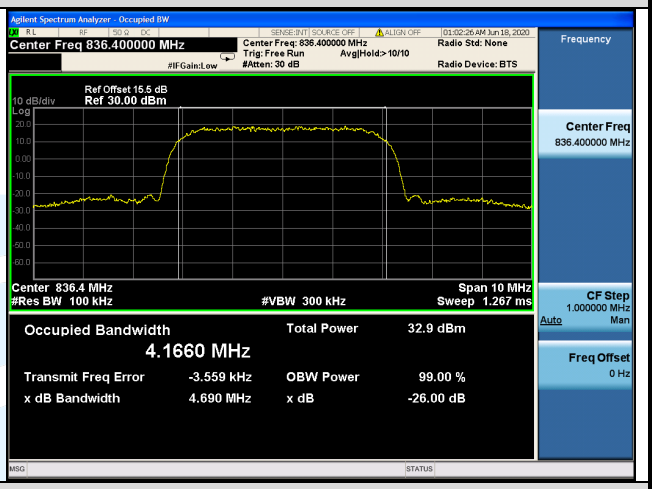


WCDMA Band V_RMC 12.2kbps

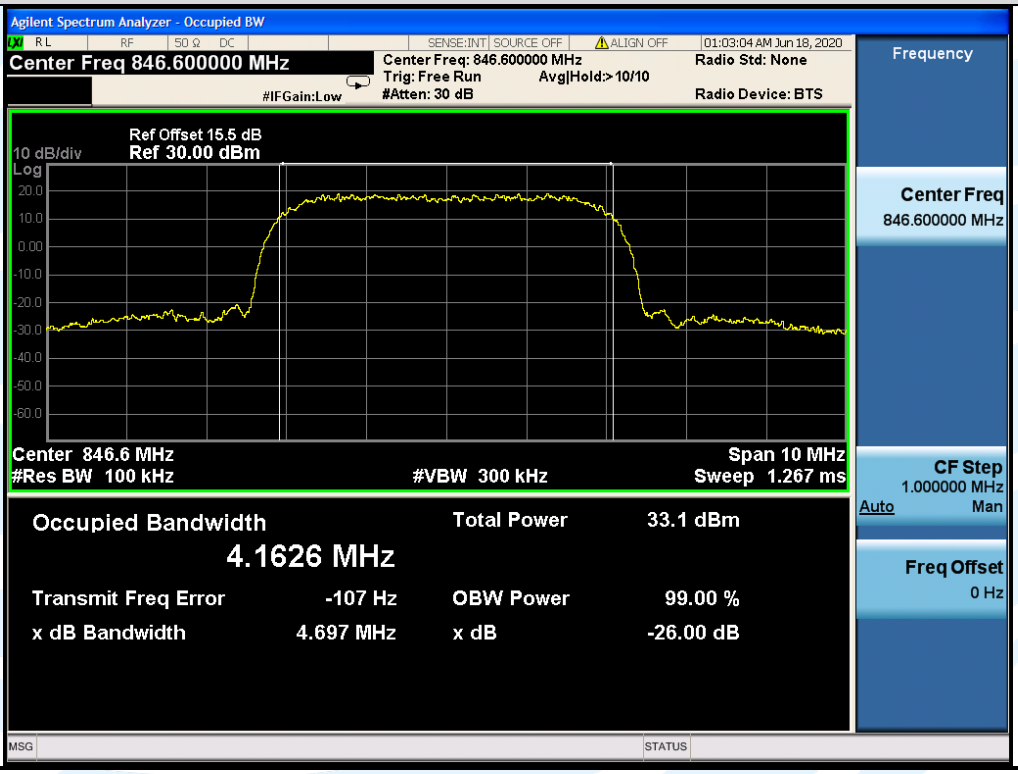
Lowest Channel



Middle Channel



Highest Channel



5.6 BAND EDGE AT ANTENNA TERMINALS

Test Requirement:	FCC 47 CFR Part 2.1051, FCC 47 CFR Part 22.917(a), FCC 47 CFR Part 24.238(a), FCC 47 CFR Part 27.53(h)(1)
Test Method:	ANSI C63.26-2015 & KDB 971168 D01v03r01

Limit:

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. The emission limit equal to -13 dBm.

Test Procedure:

The transmitter output was connected to a calibrated coaxial cable and coupler, the other end of which was connected to a spectrum analyzer.

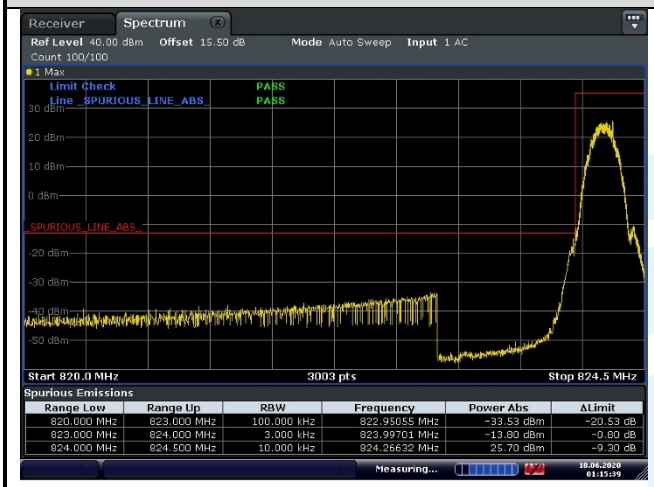
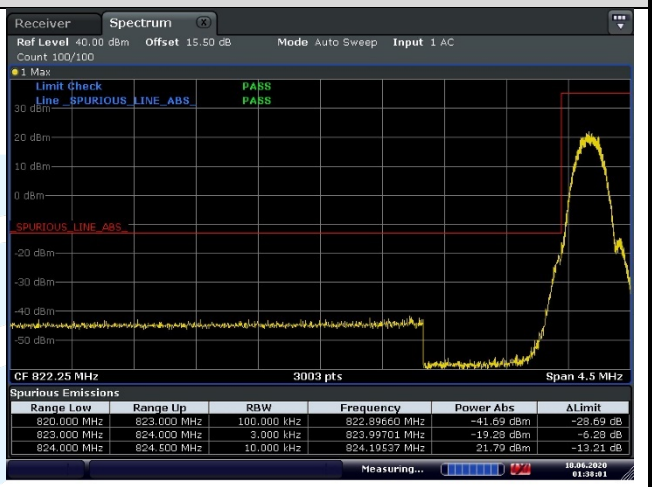
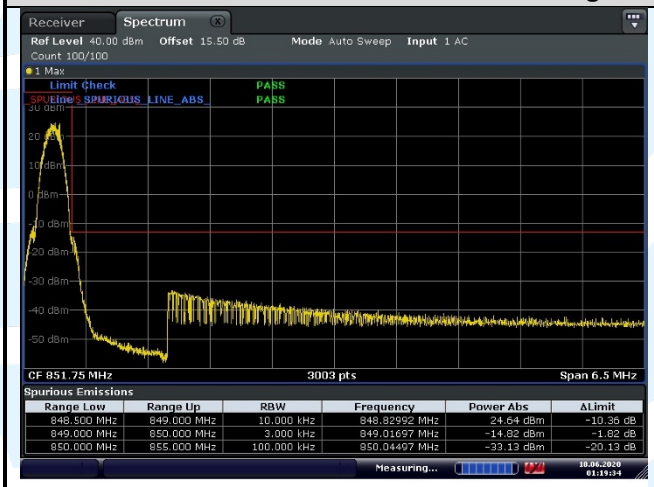
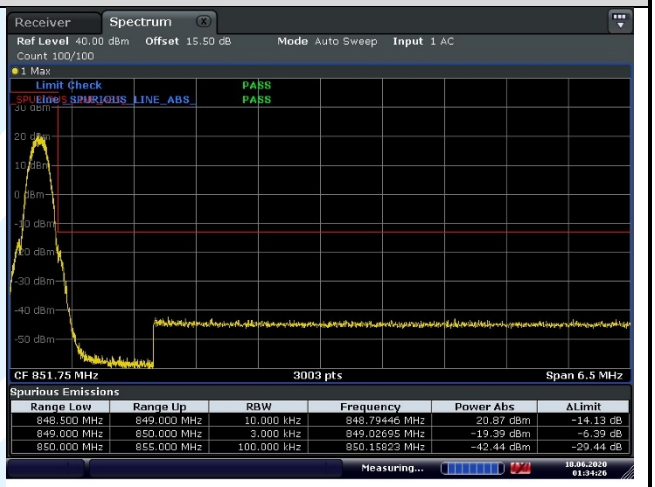
For each band edge measurement:

1) Set the spectrum analyzer span to include the block edge frequency.
2) Set a marker to point the corresponding band edge frequency in each test case.
3) Set display line at -13 dBm
4) Set resolution bandwidth to at least 1% of emission bandwidth.
5) Set spectrum analyzer with RMS detector.
6) Record the max trace plot into the test report

Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.

Test Setup:	Refer to section 4.2.2 for details.
Instruments Used:	Refer to section 3 for details
Test Mode:	Link mode
Test Results:	Pass

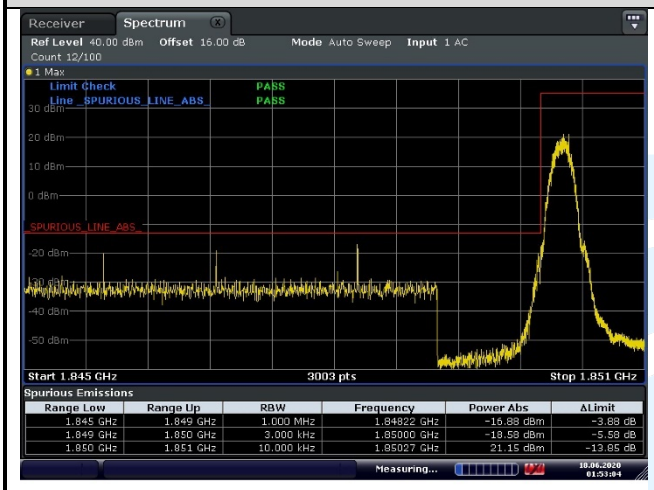
The test plots as follows:

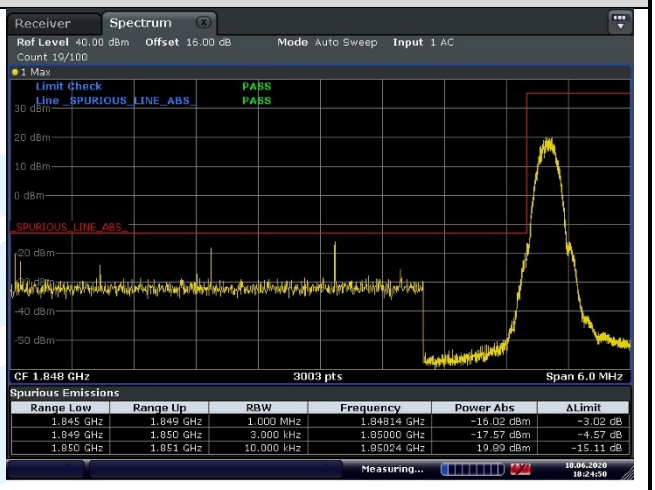
GSM 850	
GSM	EDGE
Lowest Channel	
	
Highest Channel	
	

PCS 1900

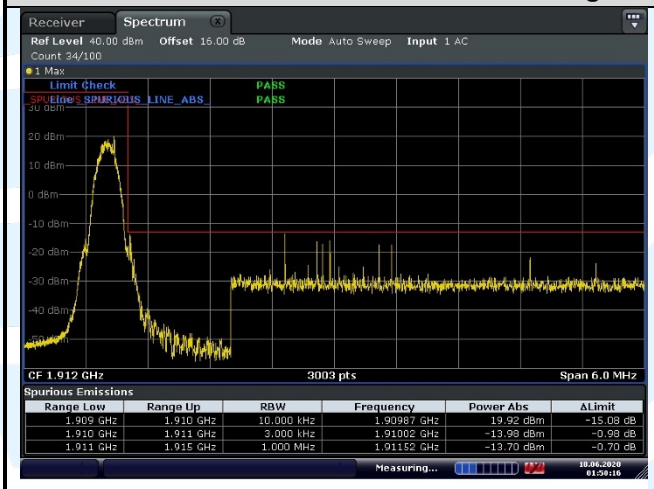
GSM	EDGE

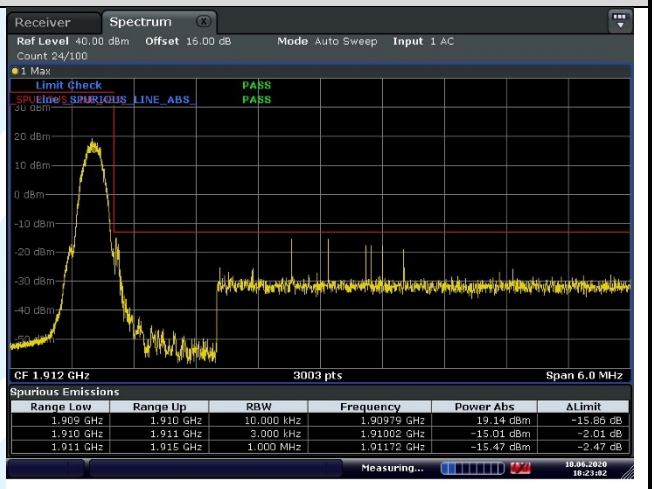
Lowest Channel





Highest Channel



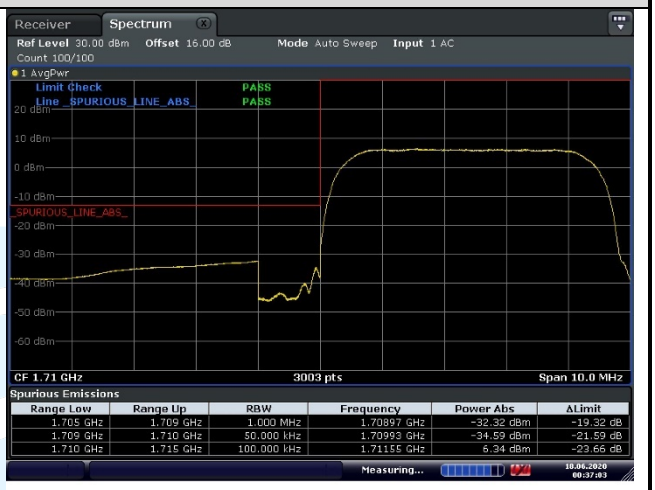


WCDMA Band II_RMC 12.2kbps

Lowest Channel

WCDMA Band IV_RMC 12.2kbps

Lowest Channel

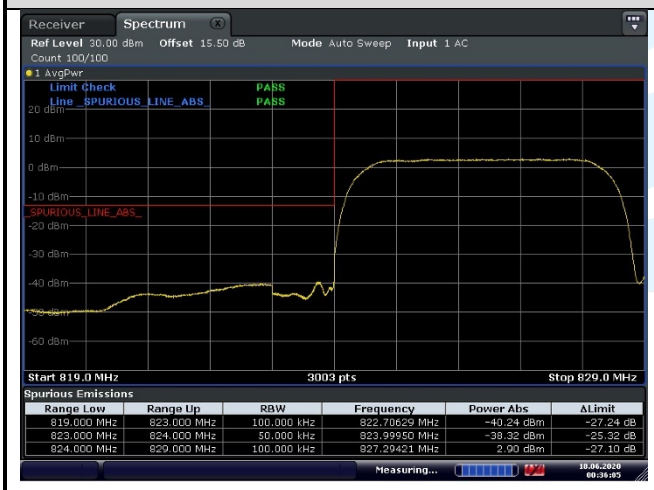


Highest Channel

Highest Channel

WCDMA Band V_RMC 12.2kbps

Lowest Channel



Highest Channel

5.7 SPURIOUS EMISSIONS AT ANTENNA TERMINALS

Test Requirement: FCC 47 CFR Part 2.1051,
FCC 47 CFR Part 22.917(a)(b),
FCC 47 CFR Part 24.238(a)(b),
FCC 47 CFR Part 27.53(h)(1)

Test Method: ANSI C63.26-2015 & KDB 971168 D01v03r01

Limit:

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. The emission limit equal to -13 dBm.

Test Procedure:

The EUT makes a phone call to the communication simulator. All measurements were done at low, middle and high operational frequency range. b. Measuring frequency range is from 30 MHz to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower. Set RBW & VBW to 100 kHz for the measurement below 1 GHz, and 1 MHz for the measurement above 1 GHz.

Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.

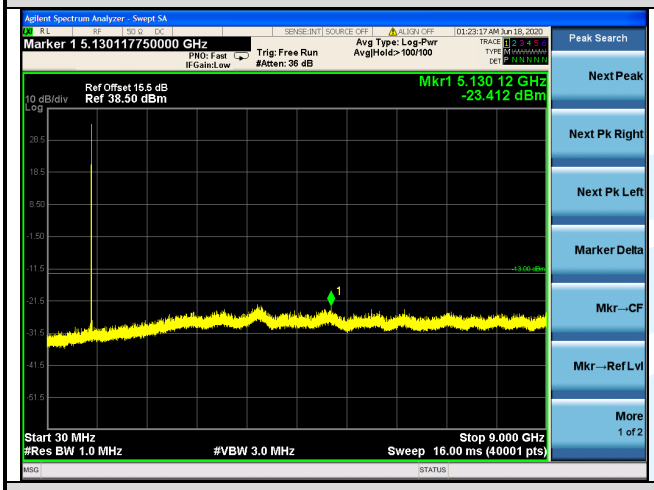
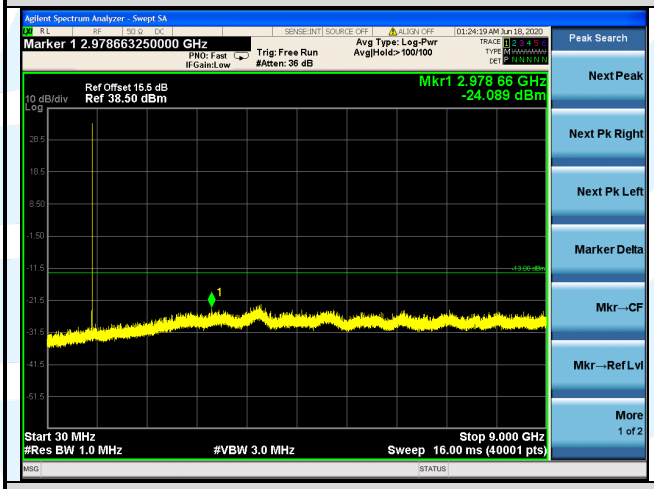
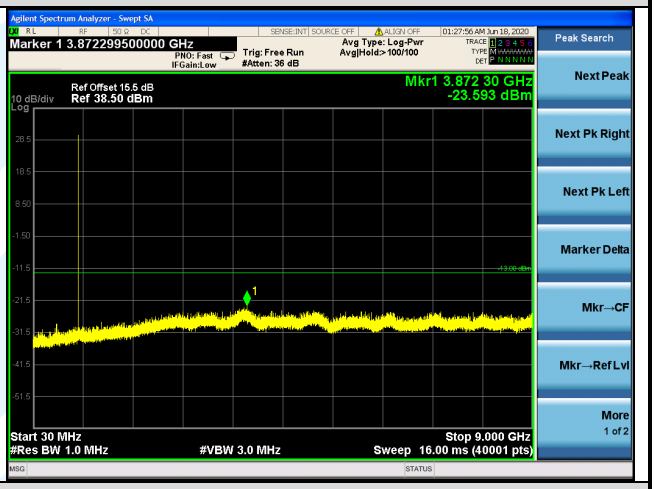
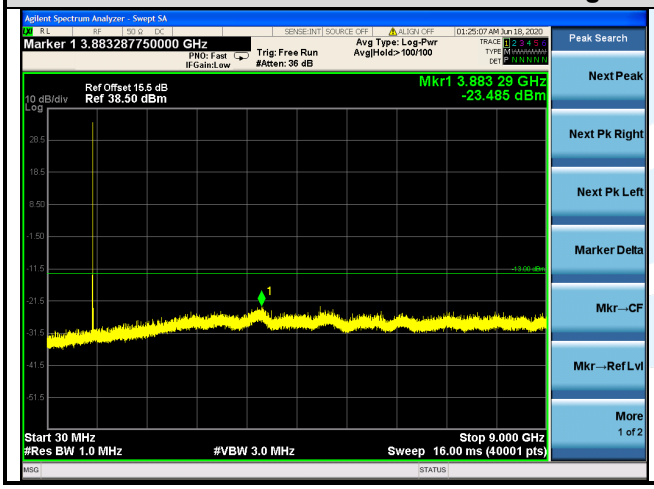
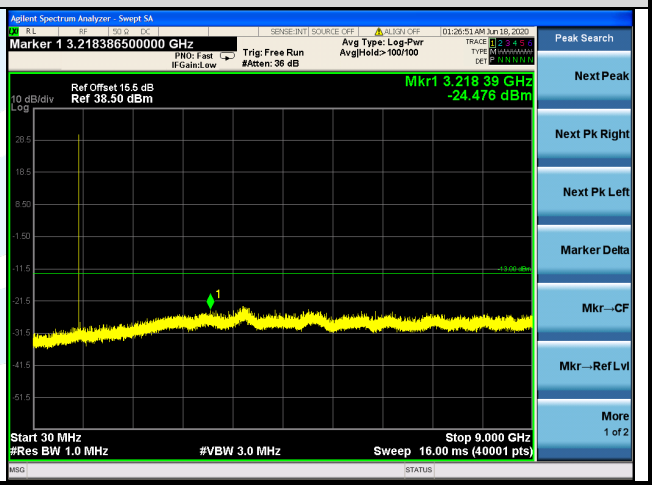
Test Setup: Refer to section 4.2.2 for details.

Instruments Used: Refer to section 3 for details

Test Mode: Link mode

Test Results: Pass

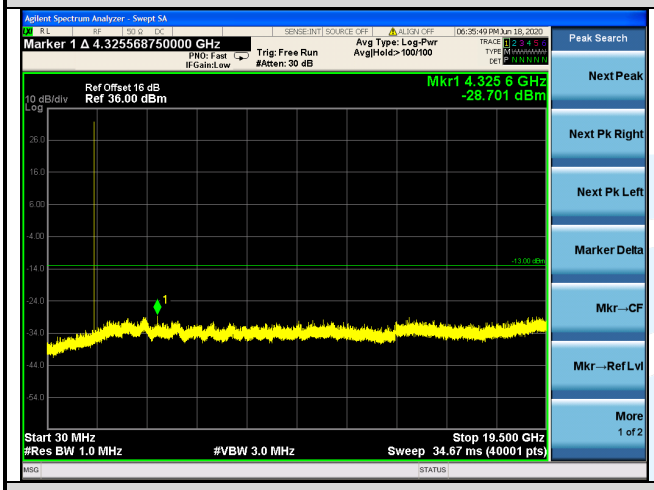
The test plots as follows:

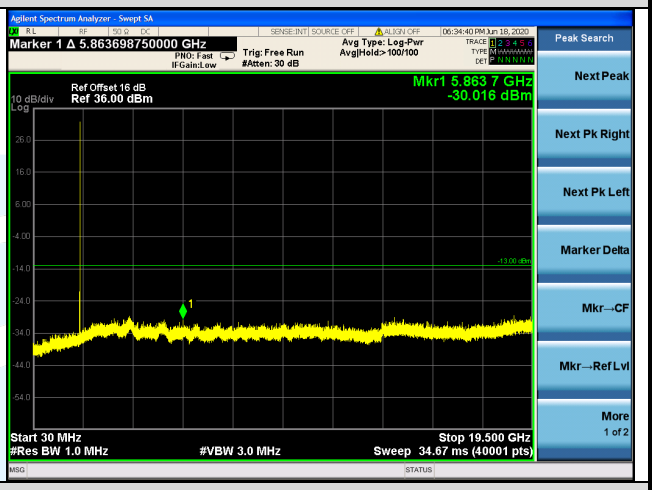
GSM 850	
GSM	EDGE
Lowest Channel	
	
Middle Channel	
	
Highest Channel	
	

PCS 1900

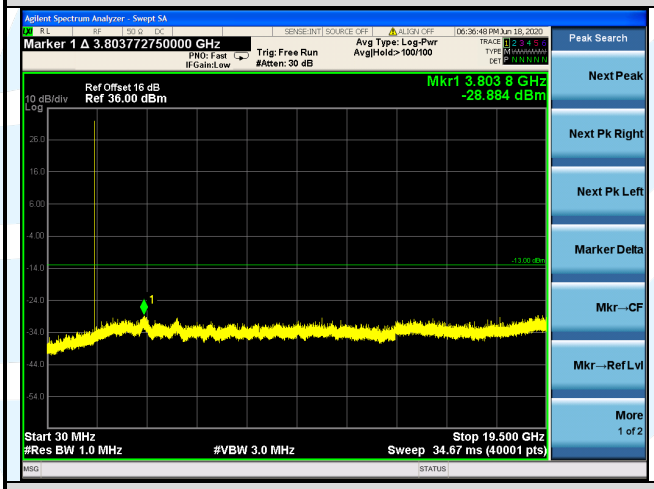
GSM	EDGE

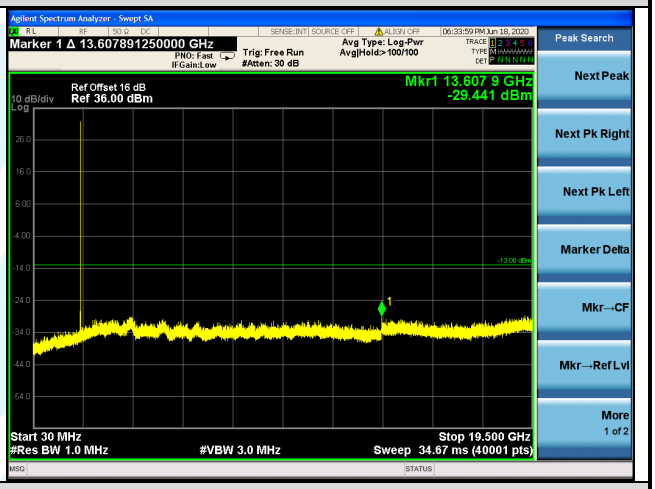
Lowest Channel



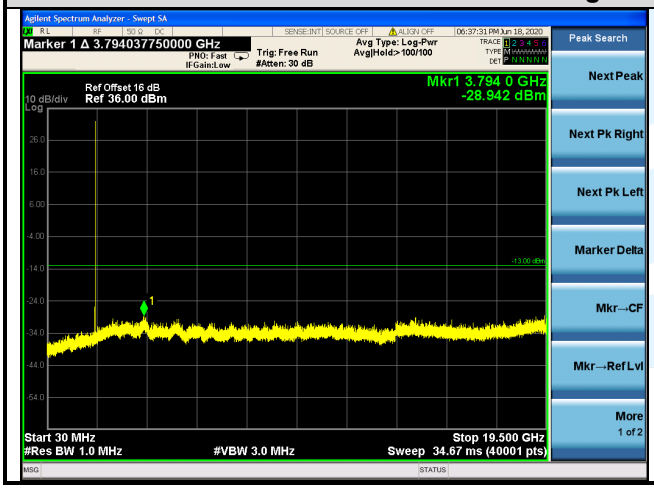


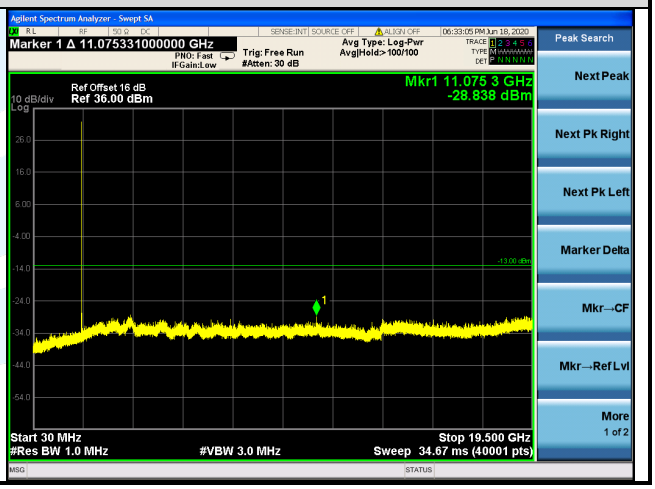
Middle Channel





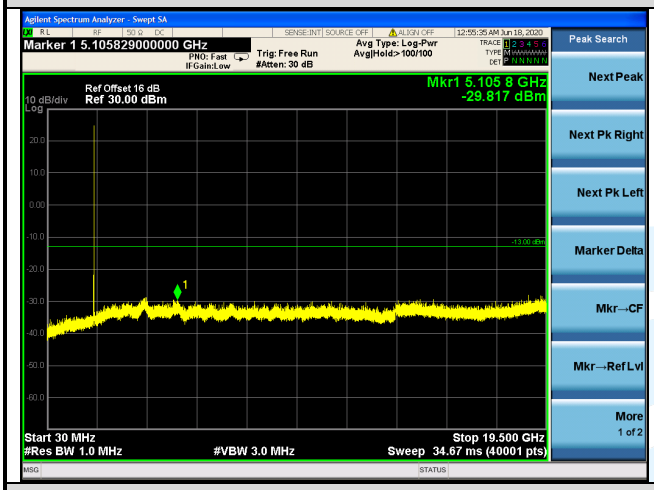
Highest Channel

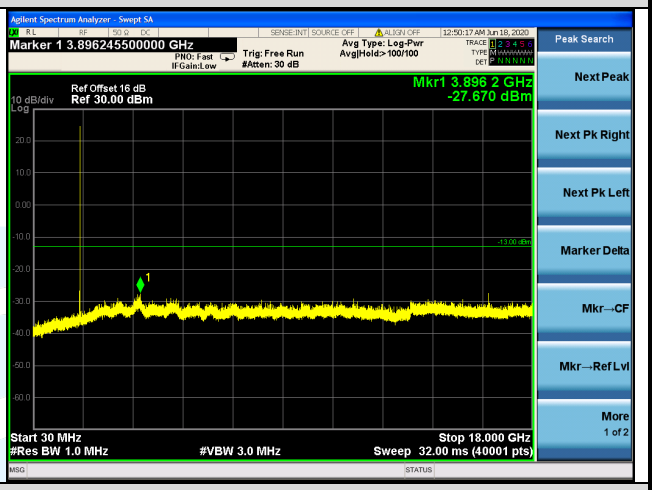




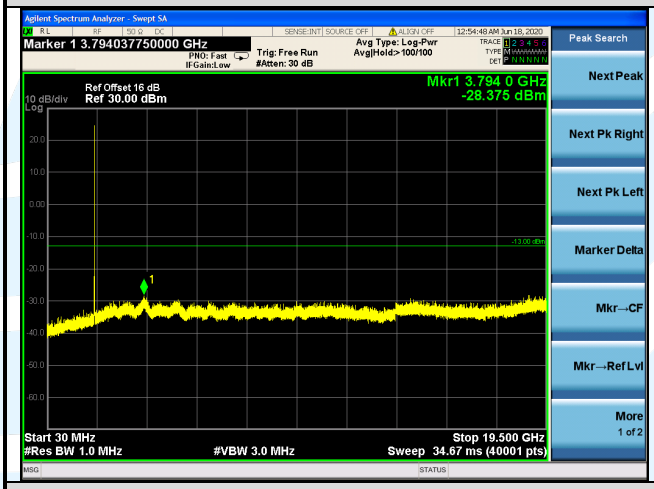
WCDMA Band II_RMC 12.2kbps	WCDMA Band IV_RMC 12.2kbps

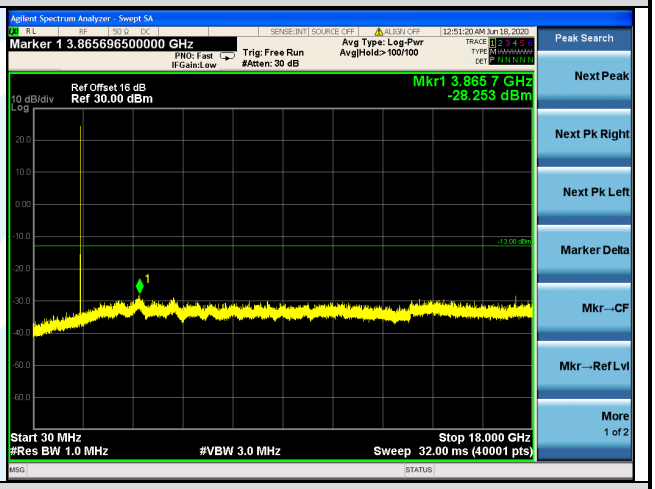
Lowest Channel



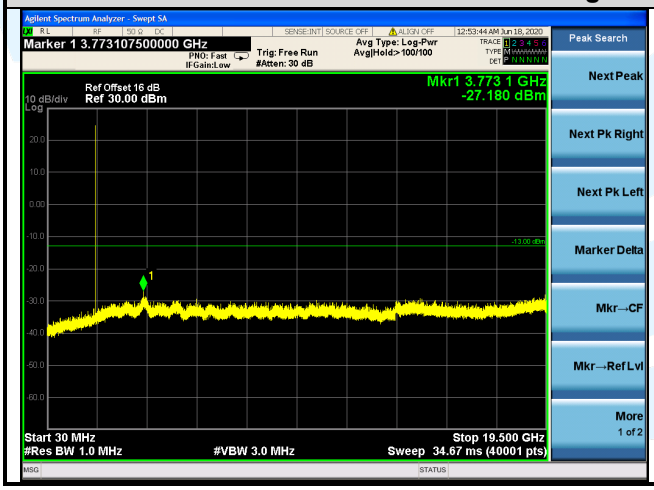


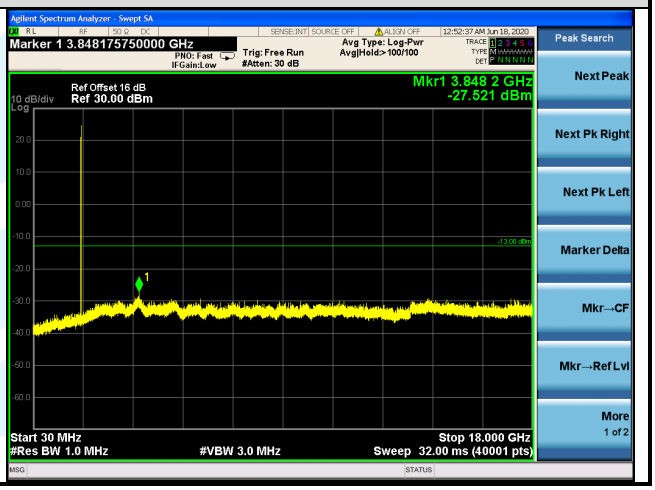
Middle Channel





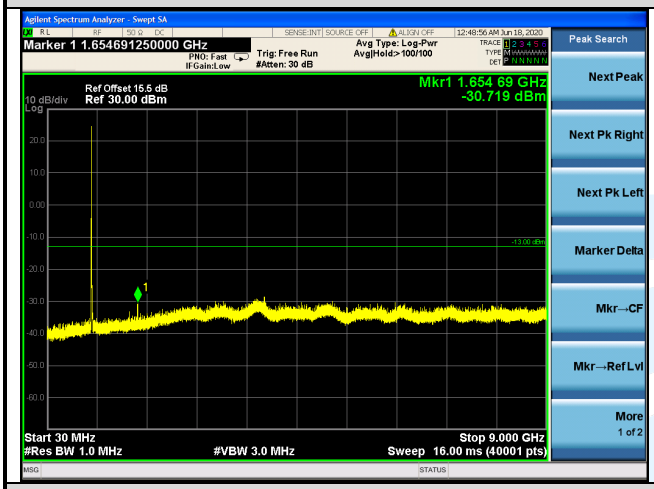
Highest Channel





WCDMA Band V_RMC 12.2kbps

Lowest Channel



Middle Channel

Highest Channel

5.8 FIELD STRENGTH OF SPURIOUS RADIATION

Test Requirement: FCC 47 CFR Part 2.1053,
FCC 47 CFR Part 22.917(a)(b),
FCC 47 CFR Part 24.238(a)(b),
FCC 47 CFR Part 27.53(h)(1)

Test Method: ANSI C63.26-2015 & KDB 971168 D01v03r01 Section 7

Limits:

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. The emission limit equal to -13 dBm.

Test Setup: Refer to section 4.2.1 for details.

Test Procedures: KDB 971168 D01v03r01 Section 7

Equipment Used: Refer to section 3 for details.

Test Result: Pass

The measurement data as follows:

Below 1G

GSM 850							
No.	Frequency (MHz)	SA Reading (dBm)	Correction factor (dB/m)	EIRP Result (dBm)	Limit (dBm)	Margin (dB)	Ant. Pol.
GPRS_ Lowest Channel							
1	159.759	-83.58	33.24	-50.34	-13.00	-37.34	Horizontal
2	240.144	-82.01	36.38	-45.63	-13.00	-32.63	Horizontal
3	754.963	-87.56	47.50	-40.06	-13.00	-27.06	Horizontal
4	46.708	-84.91	30.80	-54.11	-13.00	-41.11	Vertical
5	433.340	-85.03	41.32	-43.71	-13.00	-30.71	Vertical
6	502.247	-83.76	43.49	-40.27	-13.00	-27.27	Vertical
GPRS_ Middle Channel							
1	31.735	-91.18	37.66	-53.52	-13.00	-40.52	Horizontal
2	159.759	-83.29	33.24	-50.05	-13.00	-37.05	Horizontal
3	240.144	-81.34	36.38	-44.96	-13.00	-31.96	Horizontal
4	43.233	-84.85	31.61	-53.24	-13.00	-40.24	Vertical
5	433.340	-86.39	41.32	-45.07	-13.00	-32.07	Vertical
6	498.730	-84.47	43.34	-41.13	-13.00	-28.13	Vertical
GPRS_ Middle Channel							
1	159.759	-83.41	33.24	-50.17	-13.00	-37.17	Horizontal
2	240.144	-81.95	36.38	-45.57	-13.00	-32.57	Horizontal
3	679.435	-87.68	47.15	-40.53	-13.00	-27.53	Horizontal
4	43.233	-84.86	31.61	-53.25	-13.00	-40.25	Vertical
5	433.340	-85.37	41.32	-44.05	-13.00	-31.05	Vertical
6	498.730	-84.61	43.34	-41.27	-13.00	-28.27	Vertical

PCS 1900							
No.	Frequency (MHz)	SA Reading (dBm)	Correction factor (dB/m)	EIRP Result (dBm)	Limit (dBm)	Margin (dB)	Ant. Pol.
GPRS_ Lowest Channel							
1	159.759	-82.58	33.24	-49.34	-13.00	-36.34	Horizontal
2	240.144	-81.35	36.38	-44.97	-13.00	-31.97	Horizontal
3	1000.000	-87.29	53.15	-34.14	-13.00	-21.14	Horizontal
4	43.845	-84.29	31.47	-52.82	-13.00	-39.82	Vertical
5	502.247	-83.65	43.49	-40.16	-13.00	-27.16	Vertical
6	972.283	-86.36	51.84	-34.52	-13.00	-21.52	Vertical
GPRS_ Middle Channel							
1	159.759	-82.97	33.24	-49.73	-13.00	-36.73	Horizontal
2	240.144	-83.01	36.38	-46.63	-13.00	-33.63	Horizontal
3	979.139	-86.95	52.26	-34.69	-13.00	-21.69	Horizontal
4	42.630	-85.70	31.76	-53.94	-13.00	-40.94	Vertical
5	200.043	-89.33	34.30	-55.03	-13.00	-42.03	Vertical
6	502.247	-84.63	43.49	-41.14	-13.00	-28.14	Vertical
GPRS_ Highest Channel							
1	159.759	-83.44	33.24	-50.20	-13.00	-37.20	Horizontal
2	240.144	-83.10	36.38	-46.72	-13.00	-33.72	Horizontal
3	979.139	-86.71	52.26	-34.45	-13.00	-21.45	Horizontal
4	42.931	-86.31	31.69	-54.62	-13.00	-41.62	Vertical
5	205.746	-89.34	34.56	-54.78	-13.00	-41.78	Vertical
6	912.695	-87.81	49.93	-37.88	-13.00	-24.88	Vertical

WCDMA Band II							
No.	Frequency (MHz)	SA Reading (dBm)	Correction factor (dB/m)	EIRP Result (dBm)	Limit (dBm)	Margin (dB)	Ant. Pol.
RMC 12.2kbps_ Lowest Channel							
1	159.759	-83.00	33.24	-49.76	-13.00	-36.76	Horizontal
2	240.144	-80.28	36.38	-43.90	-13.00	-30.90	Horizontal
3	734.037	-87.93	47.56	-40.37	-13.00	-27.37	Horizontal
4	44.154	-86.13	31.39	-54.74	-13.00	-41.74	Vertical
5	554.171	-89.13	44.67	-44.46	-13.00	-31.46	Vertical
6	952.000	-86.92	51.61	-35.31	-13.00	-22.31	Vertical
RMC 12.2kbps_ Middle Channel							
1	159.759	-82.67	33.24	-49.43	-13.00	-36.43	Horizontal
2	240.144	-80.25	36.38	-43.87	-13.00	-30.87	Horizontal
3	992.997	-86.97	52.85	-34.12	-13.00	-21.12	Horizontal
4	46.056	-83.96	30.96	-53.00	-13.00	-40.00	Vertical
5	498.730	-85.09	43.34	-41.75	-13.00	-28.75	Vertical
6	992.997	-86.95	52.79	-34.16	-13.00	-21.16	Vertical
RMC 12.2kbps_ Highest Channel							
1	159.759	-82.86	33.24	-49.62	-13.00	-36.62	Horizontal
2	240.144	-82.20	36.38	-45.82	-13.00	-32.82	Horizontal
3	992.997	-86.99	52.85	-34.14	-13.00	-21.14	Horizontal
4	32.184	-91.02	37.83	-53.19	-13.00	-40.19	Vertical
5	43.538	-84.54	31.54	-53.00	-13.00	-40.00	Vertical
6	498.730	-84.16	43.34	-40.82	-13.00	-27.82	Vertical

WCDMA Band IV							
No.	Frequency (MHz)	SA Reading (dBm)	Correction factor (dB/m)	EIRP Result (dBm)	Limit (dBm)	Margin (dB)	Ant. Pol.
RMC 12.2kbps_ Lowest Channel							
1	31.292	-91.34	37.94	-53.40	-13.00	-40.40	Horizontal
2	240.144	-83.72	36.38	-47.34	-13.00	-34.34	Horizontal
3	992.997	-87.65	52.85	-34.80	-13.00	-21.80	Horizontal
4	43.538	-84.54	31.54	-53.00	-13.00	-40.00	Vertical
5	498.730	-84.16	43.34	-40.82	-13.00	-27.82	Vertical
6	945.334	-86.77	51.37	-35.40	-13.00	-22.40	Vertical
RMC 12.2kbps_ Middle Channel							
1	159.759	-84.24	33.24	-51.00	-13.00	-38.00	Horizontal
2	240.144	-83.72	36.38	-47.34	-13.00	-34.34	Horizontal
3	992.997	-87.06	52.85	-34.21	-13.00	-21.21	Horizontal
4	43.845	-86.94	31.47	-55.47	-13.00	-42.47	Vertical
5	343.651	-89.32	38.94	-50.38	-13.00	-37.38	Vertical
6	979.139	-87.62	52.09	-35.53	-13.00	-22.53	Vertical
RMC 12.2kbps_ Highest Channel							
1	159.759	-83.62	33.24	-50.38	-13.00	-37.38	Horizontal
2	240.144	-85.16	36.38	-48.78	-13.00	-35.78	Horizontal
3	972.283	-87.59	52.00	-35.59	-13.00	-22.59	Horizontal
4	30.425	-90.67	39.06	-51.61	-13.00	-38.61	Vertical
5	46.056	-86.20	30.96	-55.24	-13.00	-42.24	Vertical
6	945.334	-85.60	51.37	-34.23	-13.00	-21.23	Vertical

WCDMA Band V							
No.	Frequency (MHz)	SA Reading (dBm)	Correction factor (dB/m)	EIRP Result (dBm)	Limit (dBm)	Margin (dB)	Ant. Pol.
RMC 12.2kbps_ Lowest Channel							
1	159.759	-83.87	33.24	-50.63	-13.00	-37.63	Horizontal
2	240.144	-83.38	36.38	-47.00	-13.00	-34.00	Horizontal
3	875.013	-74.33	48.26	-26.07	-13.00	-13.07	Horizontal
4	42.931	-84.65	31.69	-52.96	-13.00	-39.96	Vertical
5	502.247	-84.76	43.49	-41.27	-13.00	-28.27	Vertical
6	875.013	-76.87	48.56	-28.31	-13.00	-15.31	Vertical
RMC 12.2kbps_ Middle Channel							
1	159.759	-87.30	33.24	-54.06	-13.00	-41.06	Horizontal
2	230.230	-82.83	35.96	-46.87	-13.00	-33.87	Horizontal
3	887.398	-75.79	48.69	-27.10	-13.00	-14.10	Horizontal
4	46.056	-85.04	30.96	-54.08	-13.00	-41.08	Vertical
5	498.730	-83.62	43.34	-40.28	-13.00	-27.28	Vertical
6	887.398	-77.62	48.99	-28.63	-13.00	-15.63	Vertical
RMC 12.2kbps_ Highest Channel							
1	159.759	-82.36	33.24	-49.12	-13.00	-36.12	Horizontal
2	228.617	-83.67	35.89	-47.78	-13.00	-34.78	Horizontal
3	893.656	-73.55	48.90	-24.65	-13.00	-11.65	Horizontal
4	44.466	-84.77	31.32	-53.45	-13.00	-40.45	Vertical
5	502.247	-84.71	43.49	-41.22	-13.00	-28.22	Vertical
6	893.656	-78.08	49.20	-28.88	-13.00	-15.88	Vertical

Above 1G

GSM 850							
No.	Frequency (MHz)	SA Reading (dBm)	Correction factor (dB/m)	EIRP Result (dBm)	Limit (dBm)	Margin (dB)	Ant. Pol.
GPRS_ Lowest Channel							
1	1648.400	-69.05	4.50	-64.55	-13.00	-51.55	Horizontal
2	2472.600	-69.06	10.87	-58.19	-13.00	-45.19	Horizontal
3	1648.400	-68.88	3.72	-65.16	-13.00	-52.16	Vertical
4	2472.600	-69.49	10.47	-59.02	-13.00	-46.02	Vertical
GPRS_ Middle Channel							
1	1673.200	-70.45	4.68	-65.77	-13.00	-52.77	Horizontal
2	2509.800	-72.44	10.87	-61.57	-13.00	-48.57	Horizontal
3	1673.200	-70.55	3.92	-66.63	-13.00	-53.63	Vertical
4	2509.800	-74.34	10.46	-63.88	-13.00	-50.88	Vertical
GPRS_ Highest Channel							
1	1697.600	-72.24	4.86	-67.38	-13.00	-54.38	Horizontal
2	2546.400	-73.64	10.91	-62.73	-13.00	-49.73	Horizontal
3	1697.600	-71.69	4.12	-67.57	-13.00	-54.57	Vertical
4	2546.400	-73.47	10.48	-62.99	-13.00	-49.99	Vertical

PCS 1900							
No.	Frequency (MHz)	SA Reading (dBm)	Correction factor (dB/m)	EIRP Result (dBm)	Limit (dBm)	Margin (dB)	Ant. Pol.
GPRS_ Lowest Channel							
1	3700.400	-70.62	14.91	-55.71	-13.00	-42.71	Horizontal
2	5550.600	-70.50	16.38	-54.12	-13.00	-41.12	Horizontal
3	3700.400	-72.15	14.89	-57.26	-13.00	-44.26	Vertical
4	5550.600	-69.41	16.87	-52.54	-13.00	-39.54	Vertical
GPRS_ Middle Channel							
1	3760.000	-66.00	15.03	-50.97	-13.00	-37.97	Horizontal
2	5640.000	-69.52	16.56	-52.96	-13.00	-39.96	Horizontal
3	3760.000	-73.43	15.03	-58.40	-13.00	-45.40	Vertical
4	5640.000	-69.77	17.04	-52.73	-13.00	-39.73	Vertical
GPRS_ Highest Channel							
1	3819.600	-70.83	15.14	-55.69	-13.00	-42.69	Horizontal
2	5729.400	-71.02	16.95	-54.07	-13.00	-41.07	Horizontal
3	3819.600	-72.35	15.17	-57.18	-13.00	-44.18	Vertical
4	5729.400	-71.16	17.40	-53.76	-13.00	-40.76	Vertical

WCDMA Band II							
No.	Frequency (MHz)	SA Reading (dBm)	Correction factor (dB/m)	EIRP Result (dBm)	Limit (dBm)	Margin (dB)	Ant. Pol.
RMC 12.2kbps_ Lowest Channel							
1	3704.800	-66.36	14.92	-51.44	-13.00	-38.44	Horizontal
2	5557.200	-71.49	16.38	-55.11	-13.00	-42.11	Horizontal
3	3704.800	-62.37	14.90	-47.47	-13.00	-34.47	Vertical
4	5557.200	-69.52	16.87	-52.65	-13.00	-39.65	Vertical
RMC 12.2kbps_ Middle Channel							
1	3760.000	-63.16	15.03	-48.13	-13.00	-35.13	Horizontal
2	5640.000	-70.47	16.56	-53.91	-13.00	-40.91	Horizontal
3	3760.000	-61.43	15.03	-46.40	-13.00	-33.40	Vertical
4	5640.000	-68.63	17.04	-51.59	-13.00	-38.59	Vertical
RMC 12.2kbps_ Highest Channel							
1	3815.200	-66.75	15.14	-51.61	-13.00	-38.61	Horizontal
2	5722.800	-68.24	16.92	-51.32	-13.00	-38.32	Horizontal
3	3815.200	-64.12	15.17	-48.95	-13.00	-35.95	Vertical
4	5722.800	-67.74	17.37	-50.37	-13.00	-37.37	Vertical

WCDMA Band IV							
No.	Frequency (MHz)	SA Reading (dBm)	Correction factor (dB/m)	EIRP Result (dBm)	Limit (dBm)	Margin (dB)	Ant. Pol.
RMC 12.2kbps_ Lowest Channel							
1	3424.800	-71.38	13.63	-57.75	-13.00	-44.75	Horizontal
2	5137.200	-70.08	15.82	-54.26	-13.00	-41.26	Horizontal
3	3424.800	-71.60	13.42	-58.18	-13.00	-45.18	Vertical
4	5137.200	-69.28	16.17	-53.11	-13.00	-40.11	Vertical
RMC 12.2kbps_ Middle Channel							
1	3464.800	-70.55	13.88	-56.67	-13.00	-43.67	Horizontal
2	5197.200	-69.37	16.02	-53.35	-13.00	-40.35	Horizontal
3	3464.800	-71.53	13.73	-57.80	-13.00	-44.80	Vertical
4	5197.200	-68.74	16.40	-52.34	-13.00	-39.34	Vertical
RMC 12.2kbps_ Highest Channel							
1	3505.200	-71.18	14.13	-57.05	-13.00	-44.05	Horizontal
2	5257.800	-68.99	16.12	-52.87	-13.00	-39.87	Horizontal
3	3505.200	-70.91	14.04	-56.87	-13.00	-43.87	Vertical
4	5257.800	-68.18	16.52	-51.66	-13.00	-38.66	Vertical

WCDMA Band V							
No.	Frequency (MHz)	SA Reading (dBm)	Correction factor (dB/m)	EIRP Result (dBm)	Limit (dBm)	Margin (dB)	Ant. Pol.
RMC 12.2kbps_ Lowest Channel							
1	1652.800	-69.65	4.54	-65.11	-13.00	-52.11	Horizontal
2	2479.200	-72.34	10.87	-61.47	-13.00	-48.47	Horizontal
3	1652.800	-70.84	3.76	-67.08	-13.00	-54.08	Vertical
4	2479.200	-72.37	10.47	-61.90	-13.00	-48.90	Vertical
RMC 12.2kbps_ Middle Channel							
1	1672.800	-71.04	4.68	-66.36	-13.00	-53.36	Horizontal
2	2509.200	-73.22	10.87	-62.35	-13.00	-49.35	Horizontal
3	1672.800	-70.93	3.92	-67.01	-13.00	-54.01	Vertical
4	2509.200	-72.05	10.46	-61.59	-13.00	-48.59	Vertical
RMC 12.2kbps_ Highest Channel							
1	1693.200	-70.65	4.83	-65.82	-13.00	-52.82	Horizontal
2	2539.800	-73.62	10.91	-62.71	-13.00	-49.71	Horizontal
3	1693.200	-71.89	4.08	-67.81	-13.00	-54.81	Vertical
4	2539.800	-74.63	10.48	-64.15	-13.00	-51.15	Vertical

Remark:

1. Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain, the value was added to Original Receiver Reading by the software automatically.
2. Result = Reading + Correct Factor.
3. Margin = Result – Limit
4. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test. Subsequently, only the worst case emissions are reported.

5.9 FREQUENCY STABILITY

Test Requirement: FCC 47 CFR Part 2.1055 &
FCC 47 CFR Part 22.355 &
FCC 47 CFR Part 24.235 &
FCC 47 CFR Part 27.54

Test Method: ANSI C63.26-2015 & KDB 971168 D01v03r01

Limits:

FCC 47 CFR Part 22.355,

The carrier frequency shall not depart from the reference frequency in excess of ±2.5 ppm for mobile stations.

FCC 47 CFR Part 24.235, FCC 47 CFR Part 27.54

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Test Setup: Refer to section 4.2.2 for details.

Test Procedures:

1) Use CMW 500 with Frequency Error measurement capability.
   a) Temp. = −30° to + 50°C
   b) Voltage =low voltage, 3.6 Vdc, Normal, 3.8 Vdc and High voltage, 4.3 Vdc.
2) Frequency Stability vs Temperature:

The EUT is place inside a temperature chamber. The temperature is set to 20ºC and allowed to stabilize. After sufficient soak time, the transmitting frequency error is measured. The temperature is increased by 10 degrees, allowed to stabilize and soak, and then the measurement is repeated. This is repeated until +50ºC is reached.

3) Frequency Stability vs Voltage:

The peak frequency error is recorded (worst-case).

Equipment Used: Refer to section 3 for details.

Test Result: Pass

Modulation	Channel/ Frequency (MHz)	Voltage (Vdc)	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Result
GSM 850							
GPRS	190 / 836.6	VL	TN	21	0.0251	± 2.5	Pass
		VN		23	0.0275	± 2.5	Pass
		VH		31	0.0371	± 2.5	Pass
		VN	50	31	0.0371	± 2.5	Pass
			40	35	0.0418	± 2.5	Pass
			30	31	0.0371	± 2.5	Pass
			20	36	0.0430	± 2.5	Pass
			10	31	0.0371	± 2.5	Pass
			0	35	0.0418	± 2.5	Pass
			-10	38	0.0454	± 2.5	Pass
			-20	33	0.0394	± 2.5	Pass
			-30	28	0.0335	± 2.5	Pass

Modulation	Channel/ Frequency (MHz)	Voltage (Vdc)	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Pass/ Fail
GSM 850							
EDGE	190 / 836.6	VL	TN	34	0.0406	± 2.5	Pass
		VN		35	0.0418	± 2.5	Pass
		VH		36	0.0430	± 2.5	Pass
		VN	50	37	0.0442	± 2.5	Pass
			40	28	0.0335	± 2.5	Pass
			30	35	0.0418	± 2.5	Pass
			20	28	0.0335	± 2.5	Pass
			10	32	0.0383	± 2.5	Pass
			0	34	0.0406	± 2.5	Pass
			-10	26	0.0311	± 2.5	Pass
			-20	27	0.0323	± 2.5	Pass
			-30	35	0.0418	± 2.5	Pass

Modulation	Channel/ Frequency (MHz)	Voltage (Vdc)	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Result
PCS 1900							
GPRS	661 / 1880.0	VL	TN	-27	-0.0144	N/A	Pass
		VN		-29	-0.0154		Pass
		VH		-31	-0.0165		Pass
		VN	50	-25	-0.0133		Pass
			40	-33	-0.0176		Pass
			30	-28	-0.0149		Pass
			20	-37	-0.0197		Pass
			10	-25	-0.0133		Pass
			0	-36	-0.0191		Pass
			-10	-26	-0.0138		Pass
			-20	-23	-0.0122		Pass
			-30	-28	-0.0149		Pass

Modulation	Channel/ Frequency (MHz)	Voltage (Vdc)	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Pass/ Fail
PCS 1900							
EDGE	661 / 1880.0	VL	TN	31	0.0165	N/A	Pass
		VN		33	0.0176		Pass
		VH		27	0.0144		Pass
		VN	50	36	0.0191		Pass
			40	31	0.0165		Pass
			30	33	0.0176		Pass
			20	27	0.0144		Pass
			10	24	0.0128		Pass
			0	27	0.0144		Pass
			-10	36	0.0191		Pass
			-20	26	0.0138		Pass
			-30	33	0.0176		Pass

Modulation	Channel/ Frequency (MHz)	Voltage (Vdc)	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Result
WCDMA Band II							
RMC 12.2kbps	9400 / 1880.0	VL	TN	26	0.0138	N/A	Pass
		VN		33	0.0176		Pass
		VH		32	0.0170		Pass
		VN	50	26	0.0138		Pass
			40	33	0.0176		Pass
			30	38	0.0202		Pass
			20	26	0.0138		Pass
			10	28	0.0149		Pass
			0	31	0.0165		Pass
			-10	33	0.0176		Pass
			-20	26	0.0138		Pass
			-30	29	0.0154		Pass

Modulation	Channel/ Frequency (MHz)	Voltage (Vdc)	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Result
WCDMA Band IV							
RMC 12.2kbps	1412 / 1732.4	VL	TN	31	0.0179	N/A	Pass
		VN		28	0.0162		Pass
		VH		31	0.0179		Pass
		VN	50	26	0.0150		Pass
			40	29	0.0167		Pass
			30	33	0.0190		Pass
			20	27	0.0156		Pass
			10	35	0.0202		Pass
			0	31	0.0179		Pass
			-10	35	0.0202		Pass
			-20	31	0.0179		Pass
			-30	25	0.0144		Pass

Modulation	Channel/ Frequency (MHz)	Voltage (Vdc)	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Result
WCDMA Band V							
RMC 12.2kbps	4182 / 836.4	VL	TN	26	0.0311	± 2.5	Pass
		VN		31	0.0371	± 2.5	Pass
		VH		28	0.0335	± 2.5	Pass
		VN	50	34	0.0407	± 2.5	Pass
			40	21	0.0251	± 2.5	Pass
			30	29	0.0347	± 2.5	Pass
			20	34	0.0407	± 2.5	Pass
			10	25	0.0299	± 2.5	Pass
			0	29	0.0347	± 2.5	Pass
			-10	31	0.0371	± 2.5	Pass
			-20	25	0.0299	± 2.5	Pass
			-30	32	0.0383	± 2.5	Pass

APPENDIX 1 PHOTOS OF TEST SETUP

See test photos attached in Appendix 1 for the actual connections between Product and support equipment.

APPENDIX 2 PHOTOS OF EUT CONSTRUCTIONAL DETAILS

Refer to Appendix 2 for EUT external and internal photos.

*** End of Report ***

The test report is effective only with both signature and specialized stamp. The result(s) shown in this report refer only to the sample(s) tested. Without written approval of UnionTrust, this report can't be reproduced except in full.