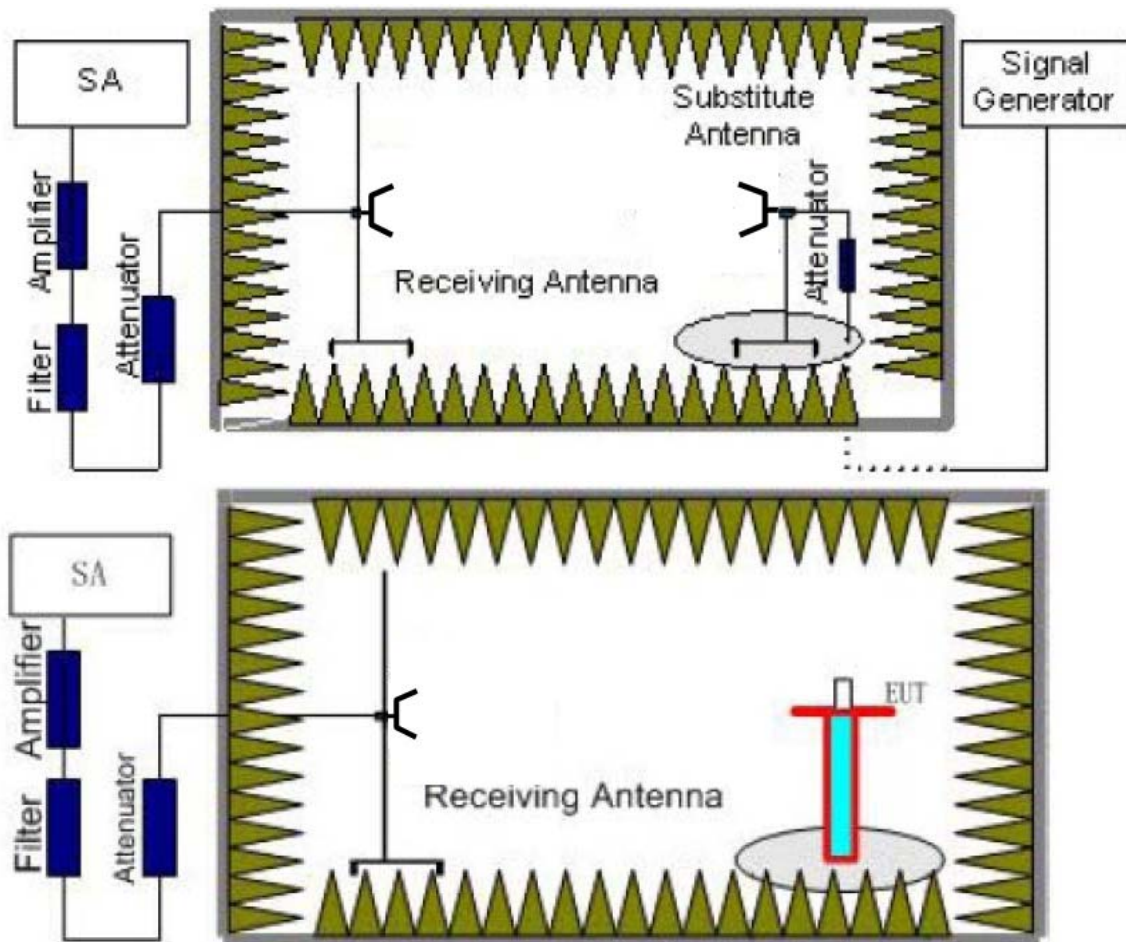


Above 1GHz:



TEST PROCEDURE

1. EUT was placed on a 0.8 meter high non-conductive stand at a 3 meter test distance from the receive antenna. A receiving antenna was placed on the antenna mast 3 meters from the EUT for emission measurements. The height of receiving antenna is 1.0 m. Detected emissions were maximized at each frequency by rotating the EUT through 360° and adjusting the receiving antenna polarization. The radiated emission measurements of all transmit frequencies in six channels were measured with peak detector.
2. A log-periodic antenna or double-ridged waveguide horn antenna shall be substituted in place of the EUT. The log-periodic antenna will be driven by a signal generator and the level will be adjusted till the same power value on the spectrum analyzer or receiver. The level of the spurious emissions can be calculated through the level of the signal generator, cable loss, the gain of the substitution antenna and the reading of the spectrum analyzer or receiver.
3. The EUT is then put into continuously transmitting mode at its maximum power level during the test. Set Test Receiver or Spectrum RBW=1MHz, VBW=3MHz for above 1GHz and RBW=100kHz, VBW=300kHz for 30MHz to 1GHz, And the maximum value of the receiver should be recorded as (P_r).
4. The EUT shall be replaced by a substitution antenna. In the chamber, an substitution antenna for the frequency band of interest is placed at the reference point of the chamber. An RF Signal source for the frequency band of interest is connected to the substitution antenna with a cable that has been constructed to not interfere with the radiation pattern of the antenna. A power (P_{Mea}) is applied to the input of the substitution antenna, and adjust the level of the signal generator output until the value of the receiver reach the previously recorded (P_r). The power of signal source (P_{Mea}) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.
5. A amplifier should be connected to the Signal Source output port. And the cable should be connect between the Amplifier and the Substitution Antenna. The cable loss (P_{cl}), the Substitution Antenna Gain (G_a) and the Amplifier Gain (P_{Ag}) should be recorded after test.
The measurement results are obtained as described below:

$$\text{Power(EIRP)} = P_{Mea} - P_{cl} - G_a$$
 We used SMF100A microwave signal generator which signal level can up to 33dBm, so we not used power Amplifier for substitution test; The measurement results are amend as described below:

$$\text{Power(EIRP)} = P_{Mea} - P_{cl} - G_a$$
6. This value is EIRP since the measurement is calibrated using an antenna of known gain (2.15 dBi) and known input power.

7. ERP can be calculated from EIRP by subtracting the gain of the dipole, $ERP = EIRP - 2.15 \text{ dB}$.

LIMIT

Modulation Type: FM

FCC Part 22.359, 74.462, 80.211 and 90.210 and RSS Gen, RSS 119 Issue 11 (12.5 kHz bandwidth only):
On any frequency removed from the center of the authorized bandwidth by a displacement frequency (f_d in kHz) of more than 12.5 kHz at least:

Low: $50 + 10 \log(P_{\text{watts}}) = 50 + 10 \log(4.00) = 56.02 \text{ dB}$

High: $50 + 10 \log(P_{\text{watts}}) = 50 + 10 \log(4.22) = 56.25 \text{ dB}$

Note: In general, the worse case attenuation requirement shown above was applied.

Calculation: Limit (dBm) = $EL - 50 - 10 \log_{10}(TP)$

Notes: EL is the emission level of the Output Power expressed in dBm,

In this application, the EL is 36.23 dBm.

Limit (dBm) = $36.23 - 50 - 10 \log_{10}(4.22) = -20 \text{ dBm}$

Modulation Type: 4FSK

FCC Part 22.359, 74.462, 80.211 and 90.210 and RSS Gen, RSS 119 Issue 11 (12.5 kHz Bandwidth only):
On any frequency removed from the center of the authorized bandwidth by a displacement frequency (f_d in kHz) of more than 12.5 kHz at least:

Low: $50 + 10 \log(P_{\text{watts}}) = 50 + 10 \log(4.12) = 56.15 \text{ dB}$

High: $50 + 10 \log(P_{\text{watts}}) = 50 + 10 \log(4.21) = 56.24 \text{ dB}$

Note: In general, the worse case attenuation requirement shown above was applied.

Calculation: Limit (dBm) = $EL - 50 - 10 \log_{10}(TP)$

Notes: EL is the emission level of the Output Power expressed in dBm,

In this application, the EL is 36.23 dBm.

Limit (dBm) = $36.23 - 50 - 10 \log_{10}(4.21) = -20 \text{ dBm}$

TEST RESULTS

Remark: We tested Op 1 to Op 4. recorded worst case at Op 1, Op 3 .

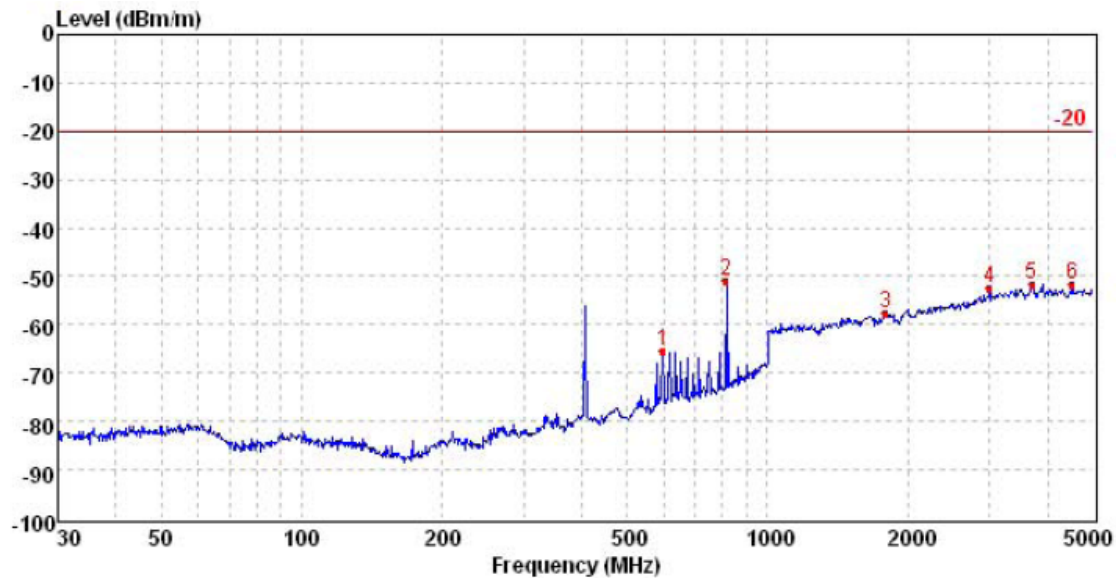
Note: 1. In general, the worse case attenuation requirement shown above was applied.

2. The measurement frequency range from 30 MHz to 5 GHz.

Test plot as follows:

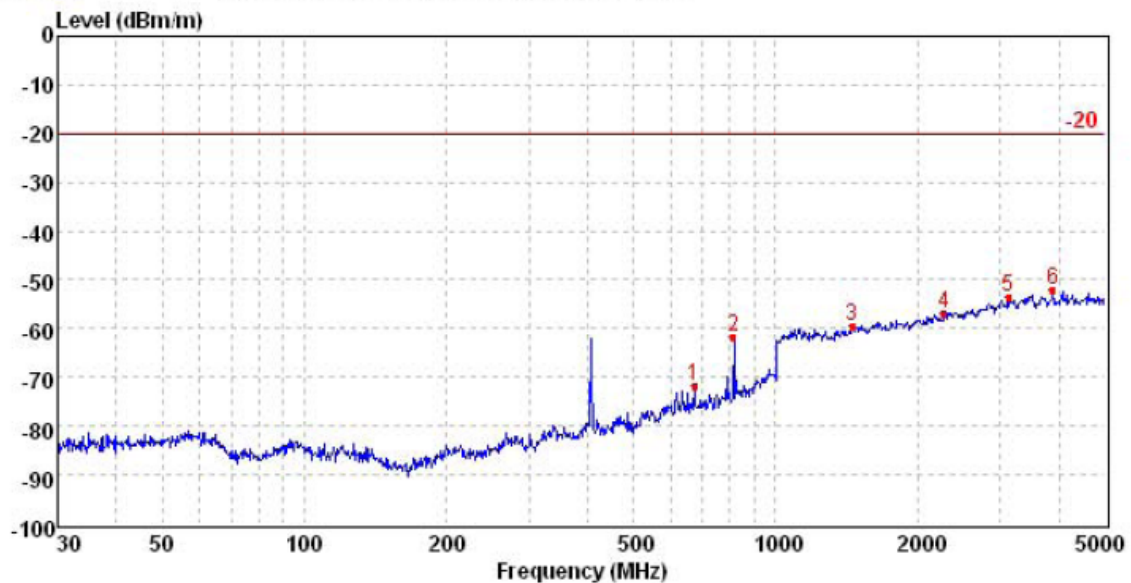
Op 1

Test Frequency: 406.5MHz Polarity: Horizontal



Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark
1	595.99	-71.17	31.58	2.86	28.77	-65.50	-20.00	-45.50	Peak
2	815.01	-59.27	33.61	3.37	28.50	-50.79	-20.00	-30.79	Peak
3	1787.84	-66.94	40.66	5.77	37.09	-57.60	-20.00	-37.60	Peak
4	3001.90	-65.98	43.29	8.18	37.99	-52.50	-20.00	-32.50	Peak
5	3688.63	-66.49	44.13	8.72	37.99	-51.63	-20.00	-31.63	Peak
6	4510.62	-68.12	45.62	8.99	38.34	-51.85	-20.00	-31.85	Peak

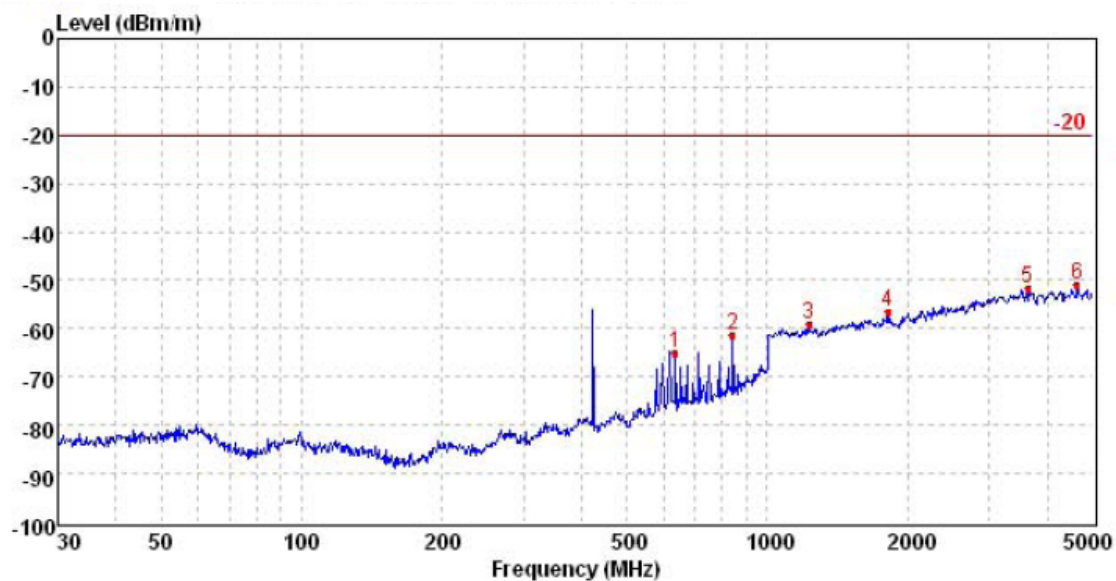
Test Frequency: 406.5MHz Polarity: Vertical



Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark
1	674.05	-78.10	31.94	3.08	28.66	-71.74	-20.00	-51.74	Peak
2	815.01	-70.18	33.61	3.37	28.50	-61.70	-20.00	-41.70	Peak
3	1457.33	-67.58	39.93	5.10	36.79	-59.34	-20.00	-39.34	Peak
4	2276.01	-67.67	41.83	6.62	37.49	-56.71	-20.00	-36.71	Peak
5	3120.12	-67.12	43.42	8.33	37.99	-53.36	-20.00	-33.36	Peak
6	3871.09	-67.23	44.45	8.66	37.99	-52.11	-20.00	-32.11	Peak

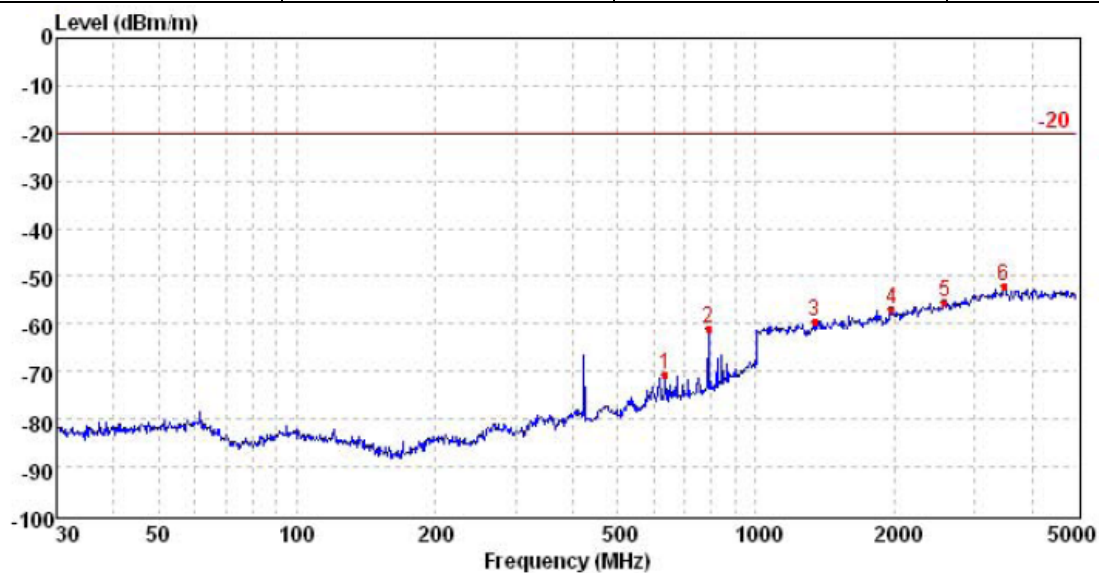
Op 1

Test Frequency: 421.5 MHz Polarity: Horizontal



Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark
1	634.94	-71.01	31.79	2.97	28.71	-64.96	-20.00	-44.96	Peak
2	844.18	-70.46	34.18	3.44	28.47	-61.31	-20.00	-41.31	Peak
3	1226.79	-66.49	39.20	4.60	36.55	-59.24	-20.00	-39.24	Peak
4	1816.85	-66.00	40.71	5.82	37.11	-56.58	-20.00	-36.58	Peak
5	3629.74	-66.64	44.04	8.75	37.99	-51.84	-20.00	-31.84	Peak
6	4635.73	-67.44	45.88	9.08	38.43	-50.91	-20.00	-30.91	Peak

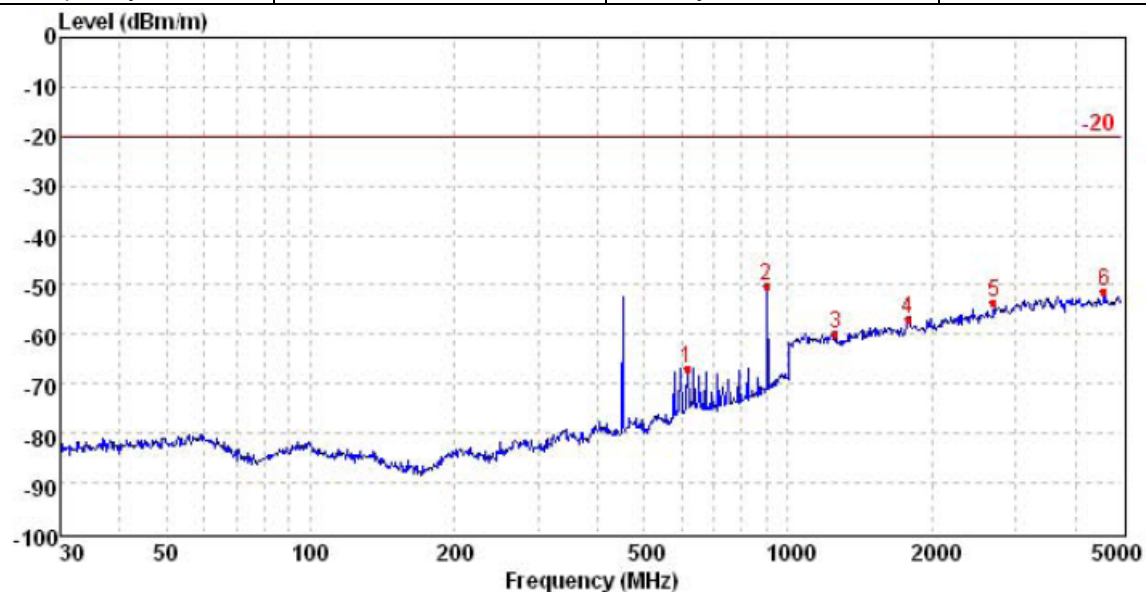
Test Frequency: 421.5MHz Polarity: Vertical



Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark
1	634.94	-76.52	31.79	2.97	28.71	-70.47	-20.00	-50.47	Peak
2	789.62	-68.79	33.15	3.28	28.53	-60.89	-20.00	-40.89	Peak
3	1344.65	-67.25	39.59	4.86	36.67	-59.47	-20.00	-39.47	Peak
4	1975.44	-66.65	41.00	6.12	37.23	-56.76	-20.00	-36.76	Peak
5	2572.15	-67.17	42.50	7.17	37.71	-55.21	-20.00	-35.21	Peak
6	3475.38	-66.43	43.75	8.77	37.99	-51.90	-20.00	-31.90	Peak

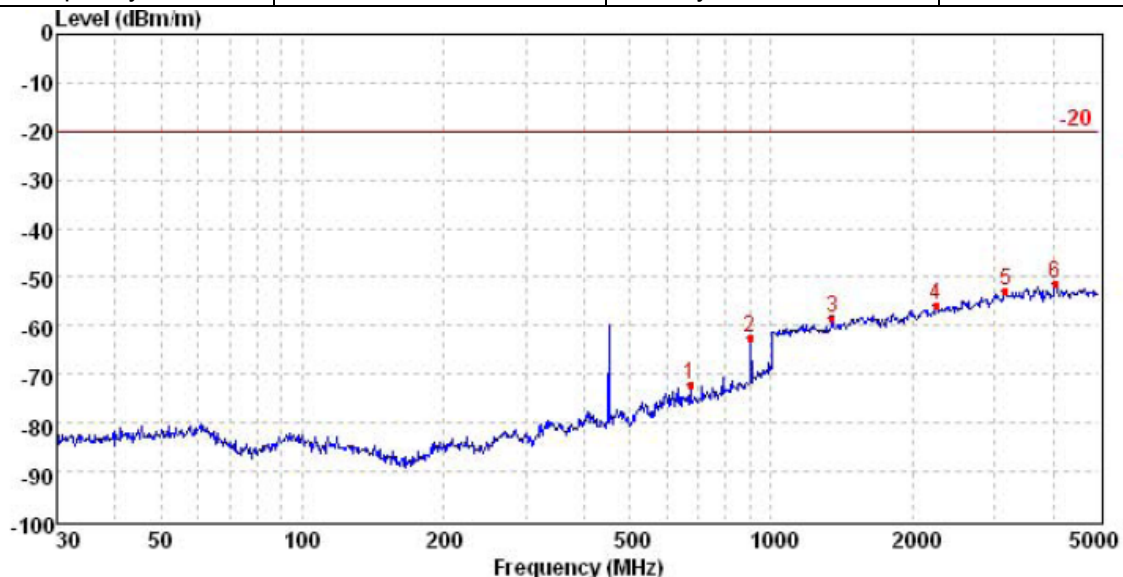
Op 1

Test Frequency: 450.5 MHz Polarity: Horizontal



Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark
1	615.16	-72.60	31.71	2.90	28.74	-66.73	-20.00	-46.73	Peak
2	902.51	-60.82	35.32	3.62	28.41	-50.29	-20.00	-30.29	Peak
3	1254.74	-67.20	39.29	4.66	36.58	-59.83	-20.00	-39.83	Peak
4	1784.96	-66.08	40.66	5.77	37.08	-56.73	-20.00	-36.73	Peak
5	2695.04	-65.91	42.73	7.47	37.79	-53.50	-20.00	-33.50	Peak
6	4591.18	-67.66	45.75	9.06	38.39	-51.24	-20.00	-31.24	Peak

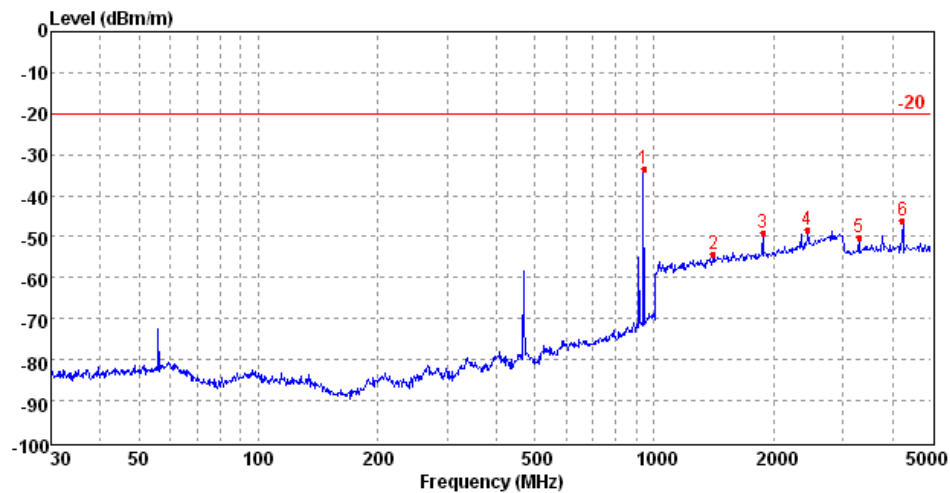
Test Frequency: 450.5MHz Polarity: Vertical



Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark
1	674.05	-78.55	31.94	3.08	28.66	-72.19	-20.00	-52.19	Peak
2	902.51	-72.92	35.32	3.62	28.41	-62.39	-20.00	-42.39	Peak
3	1351.16	-66.08	39.59	4.87	36.68	-58.30	-20.00	-38.30	Peak
4	2250.51	-66.59	41.75	6.59	37.47	-55.72	-20.00	-35.72	Peak
5	3155.47	-66.65	43.44	8.38	37.99	-52.82	-20.00	-32.82	Peak
6	4030.03	-66.68	44.78	8.63	38.01	-51.28	-20.00	-31.28	Peak

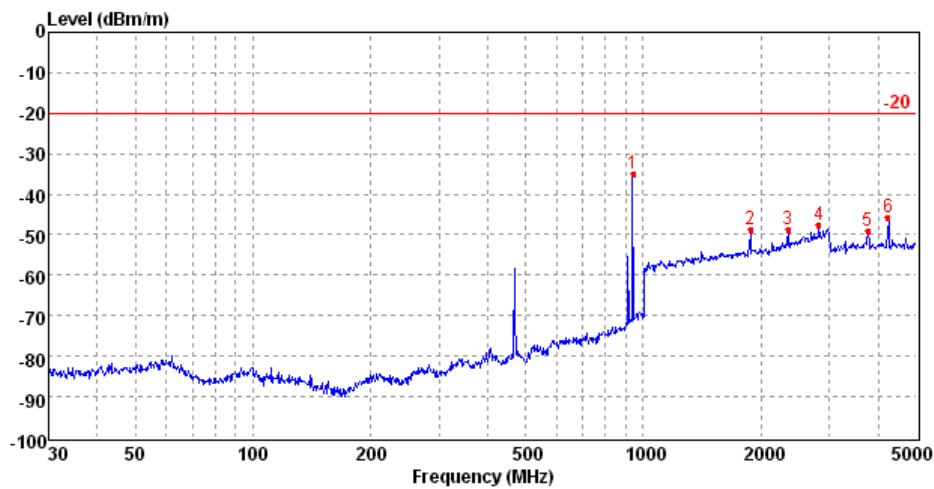
Op 1

Test Frequency: 469.5 MHz Polarity: Horizontal



Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark
1	941.41	-45.55	36.64	3.64	28.37	-33.64	-20.00	-13.64	Peak
2	1408.84	-70.32	39.79	4.57	28.18	-54.14	-20.00	-34.14	Peak
3	1878.74	-67.06	40.84	5.38	28.06	-48.90	-20.00	-28.90	Peak
4	2429.48	-69.43	42.21	6.38	27.40	-48.24	-20.00	-28.24	Peak
5	3286.69	-64.30	43.58	8.55	37.99	-50.16	-20.00	-30.16	Peak
6	4226.21	-61.75	45.11	8.78	38.15	-46.01	-20.00	-26.01	Peak

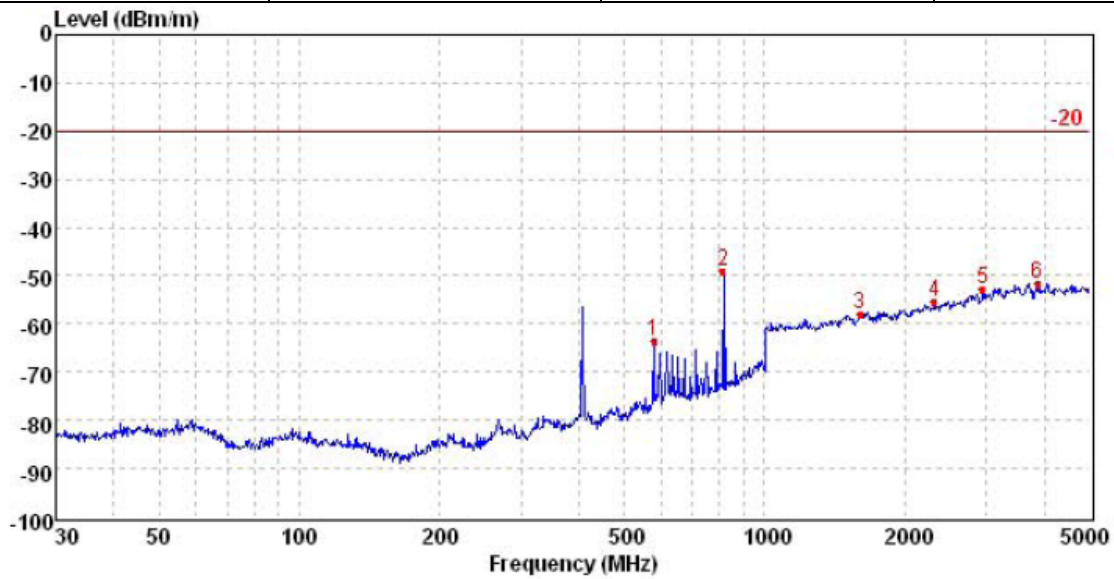
Test Frequency: 469.5MHz Polarity: Vertical



Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark
1	941.41	-47.04	36.64	3.64	28.37	-35.13	-20.00	-15.13	Peak
2	1878.74	-67.00	40.84	5.38	28.06	-48.84	-20.00	-28.84	Peak
3	2348.14	-69.27	41.98	6.27	27.52	-48.54	-20.00	-28.54	Peak
4	2817.90	-70.59	42.96	7.14	26.93	-47.42	-20.00	-27.42	Peak
5	3756.78	-64.09	44.27	8.70	37.99	-49.11	-20.00	-29.11	Peak
6	4226.21	-61.49	45.11	8.78	38.15	-45.75	-20.00	-25.75	Peak

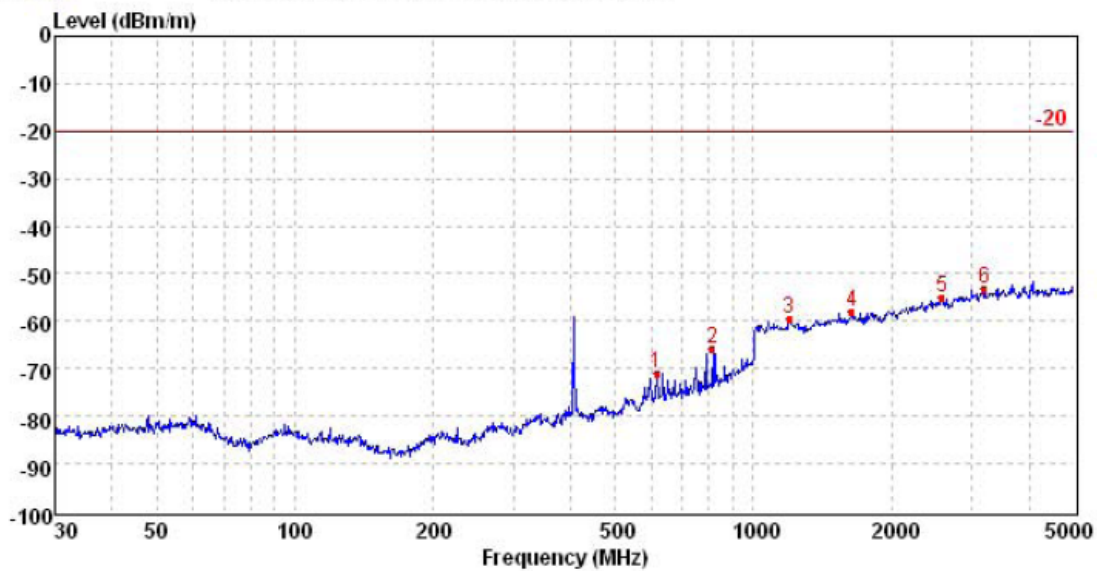
Op 3

Test Frequency: 406.5 MHz Polarity: Horizontal



Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark
1	577.43	-68.92	31.24	2.78	28.80	-63.70	-20.00	-43.70	Peak
2	815.01	-57.72	33.61	3.37	28.50	-49.24	-20.00	-29.24	Peak
3	1602.50	-66.60	40.27	5.40	36.93	-57.86	-20.00	-37.86	Peak
4	2316.66	-66.41	41.90	6.70	37.52	-55.33	-20.00	-35.33	Peak
5	2944.48	-66.09	43.19	8.04	37.96	-52.82	-20.00	-32.82	Peak
6	3858.65	-66.87	44.45	8.66	37.99	-51.75	-20.00	-31.75	Peak

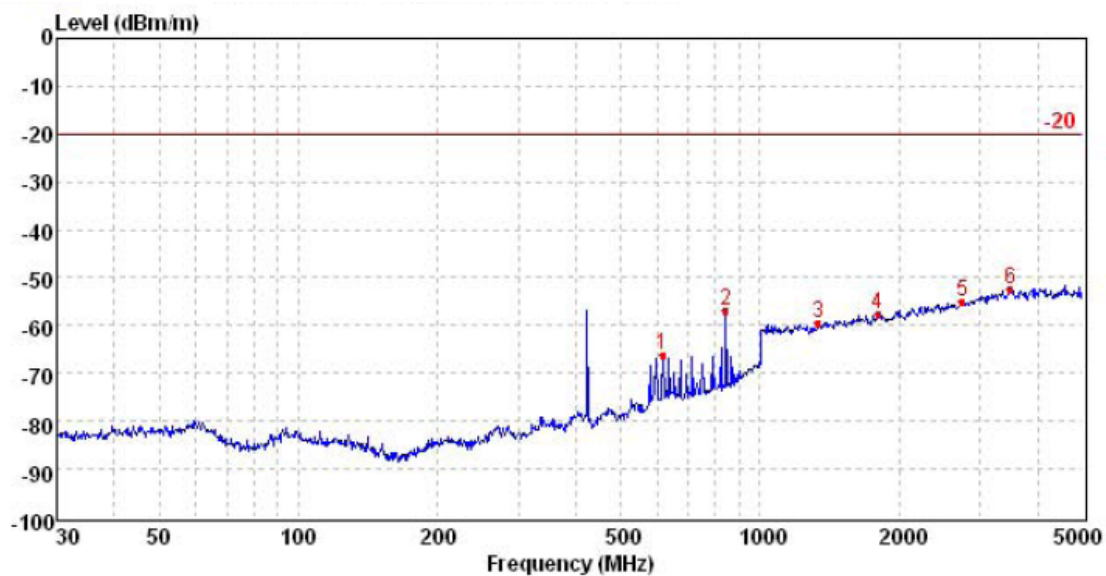
Test Frequency: 406.5MHz Polarity: Vertical



Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark
1	615.16	-76.74	31.71	2.90	28.74	-70.87	-20.00	-50.87	Peak
2	815.01	-74.30	33.61	3.37	28.50	-65.82	-20.00	-45.82	Peak
3	1199.45	-66.60	39.09	4.52	36.51	-59.50	-20.00	-39.50	Peak
4	1641.66	-66.76	40.36	5.49	36.97	-57.88	-20.00	-37.88	Peak
5	2572.15	-66.95	42.50	7.17	37.71	-54.99	-20.00	-34.99	Peak
6	3191.23	-67.20	43.48	8.42	37.99	-53.29	-20.00	-33.29	Peak

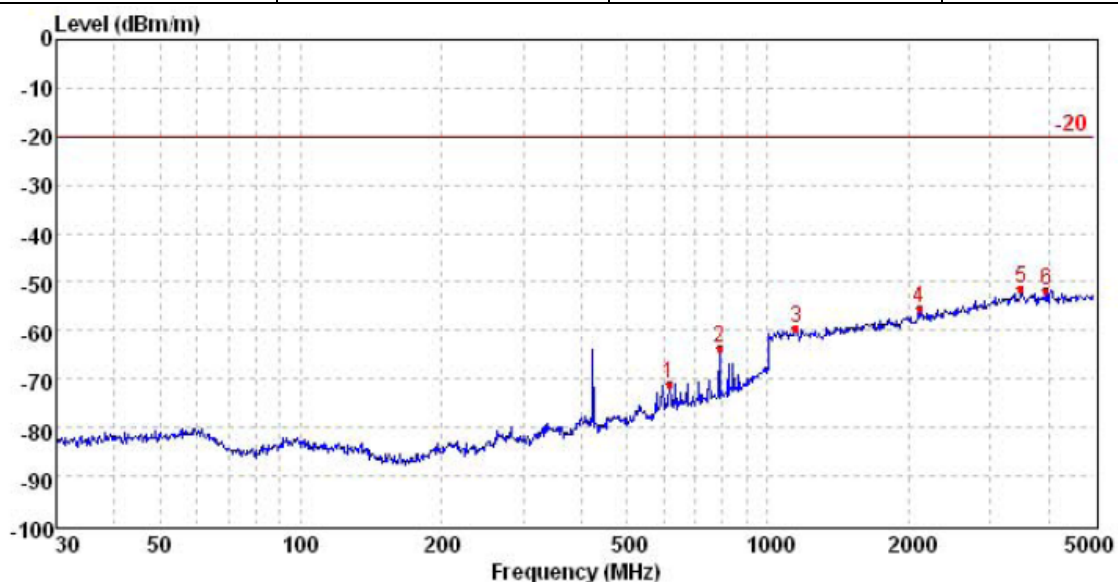
Op 3

Test Frequency: 421.5 MHz Polarity: Horizontal



Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark
1	615.16	-72.22	31.71	2.90	28.74	-66.35	-20.00	-46.35	Peak
2	844.18	-66.21	34.18	3.44	28.47	-57.06	-20.00	-37.06	Peak
3	1336.03	-67.17	39.57	4.84	36.67	-59.43	-20.00	-39.43	Peak
4	1802.28	-67.04	40.68	5.80	37.10	-57.66	-20.00	-37.66	Peak
5	2747.60	-67.69	42.83	7.60	37.83	-55.09	-20.00	-35.09	Peak
6	3480.98	-67.02	43.75	8.77	37.99	-52.49	-20.00	-32.49	Peak

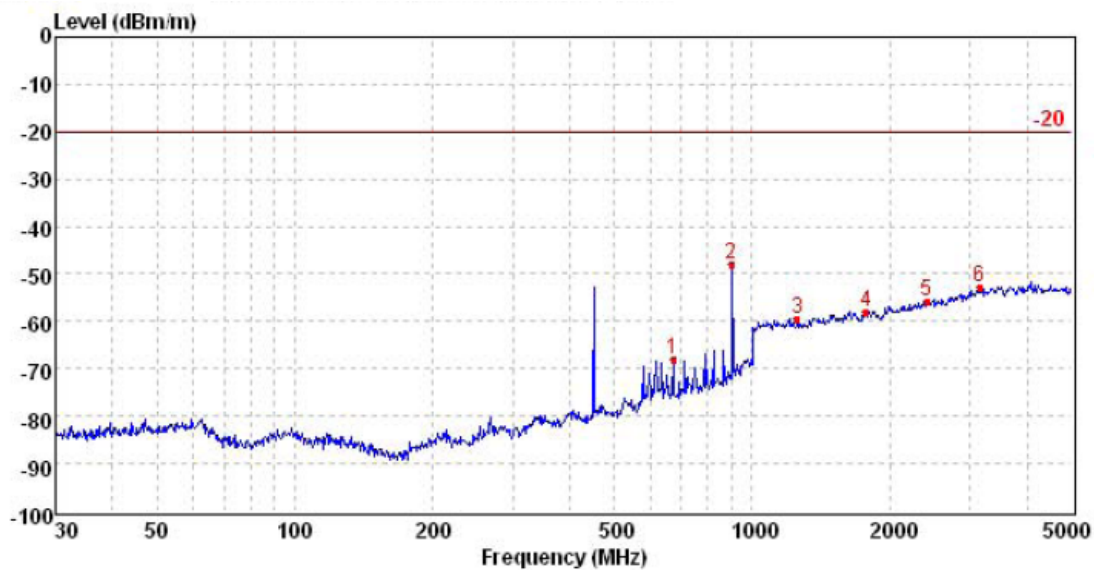
Test Frequency: 421.5MHz Polarity: Vertical



Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark
1	615.16	-76.73	31.71	2.90	28.74	-70.86	-20.00	-50.86	Peak
2	789.62	-71.48	33.15	3.28	28.53	-63.58	-20.00	-43.58	Peak
3	1150.30	-66.34	38.93	4.41	36.45	-59.45	-20.00	-39.45	Peak
4	2106.80	-65.65	41.36	6.35	37.35	-55.29	-20.00	-35.29	Peak
5	3486.59	-66.01	43.77	8.79	37.99	-51.44	-20.00	-31.44	Peak
6	3952.94	-66.89	44.63	8.63	37.99	-51.62	-20.00	-31.62	Peak

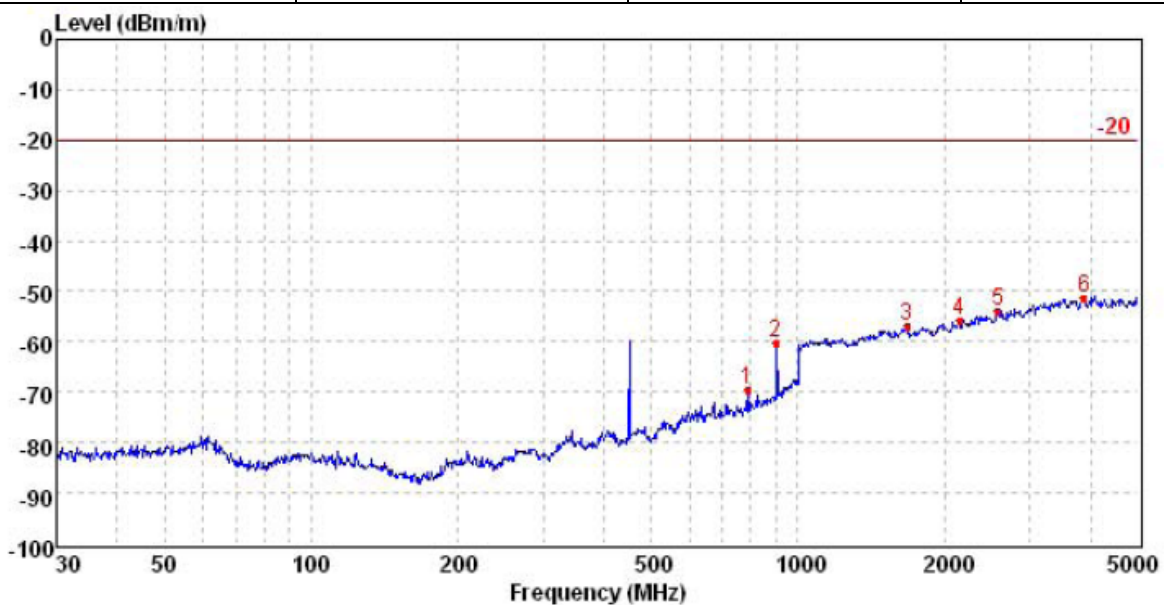
Op 3

Test Frequency: 450.5 MHz Polarity: Horizontal



Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark
1	674.05	-74.23	31.94	3.08	28.66	-67.87	-20.00	-47.87	Peak
2	902.51	-58.57	35.32	3.62	28.41	-48.04	-20.00	-28.04	Peak
3	1256.76	-66.76	39.29	4.66	36.58	-59.39	-20.00	-39.39	Peak
4	1773.51	-67.13	40.64	5.75	37.08	-57.82	-20.00	-37.82	Peak
5	2407.90	-67.12	42.14	6.84	37.59	-55.73	-20.00	-35.73	Peak
6	3140.28	-66.66	43.44	8.35	37.99	-52.86	-20.00	-32.86	Peak

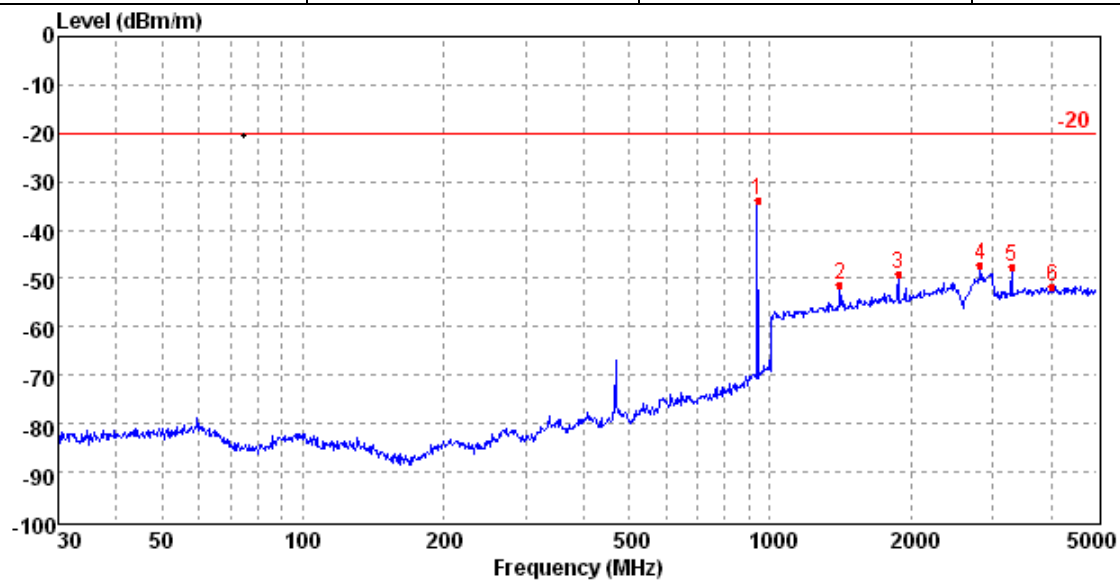
Test Frequency: 450.5MHz Polarity: Vertical



Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark
1	789.62	-77.48	33.15	3.28	28.53	-69.58	-20.00	-49.58	Peak
2	902.51	-70.92	35.32	3.62	28.41	-60.39	-20.00	-40.39	Peak
3	1679.07	-65.71	40.43	5.56	37.00	-56.72	-20.00	-36.72	Peak
4	2147.88	-66.42	41.48	6.41	37.38	-55.91	-20.00	-35.91	Peak
5	2572.15	-66.02	42.50	7.17	37.71	-54.06	-20.00	-34.06	Peak
6	3877.33	-66.47	44.50	8.66	37.99	-51.30	-20.00	-31.30	Peak

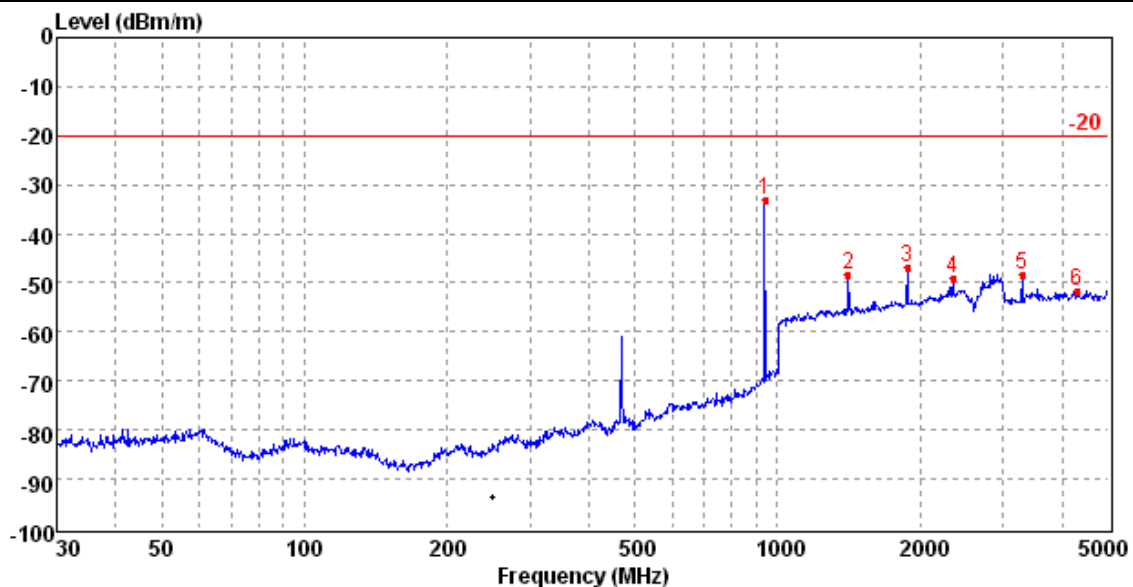
Op 3

Test Frequency: 469.5 MHz Polarity: Horizontal



Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark
1	941.41	-45.80	36.64	3.64	28.37	-33.89	-20.00	-13.89	Peak
2	1407.29	-67.38	39.79	4.54	28.18	-51.23	-20.00	-31.23	Peak
3	1878.74	-67.12	40.84	5.38	28.06	-48.96	-20.00	-28.96	Peak
4	2817.90	-70.53	42.96	7.14	26.93	-47.36	-20.00	-27.36	Peak
5	3286.69	-61.63	43.58	8.55	37.99	-47.49	-20.00	-27.49	Peak
6	4016.47	-66.96	44.73	8.62	38.00	-51.61	-20.00	-31.61	Peak

Test Frequency: 469.5MHz Polarity: Vertical



Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark
1	941.41	-44.96	36.64	3.64	28.37	-33.05	-20.00	-13.05	Peak
2	1408.84	-64.60	39.79	4.57	28.18	-48.42	-20.00	-28.42	Peak
3	1878.74	-65.09	40.84	5.38	28.06	-46.93	-20.00	-26.93	Peak
4	2348.14	-69.72	41.98	6.27	27.52	-48.99	-20.00	-28.99	Peak
5	3286.69	-62.37	43.58	8.55	37.99	-48.23	-20.00	-28.23	Peak
6	4291.91	-67.42	45.21	8.84	38.20	-51.57	-20.00	-31.57	Peak

4.10. Receiver Radiated Spurious Emission

TEST APPLICABLE

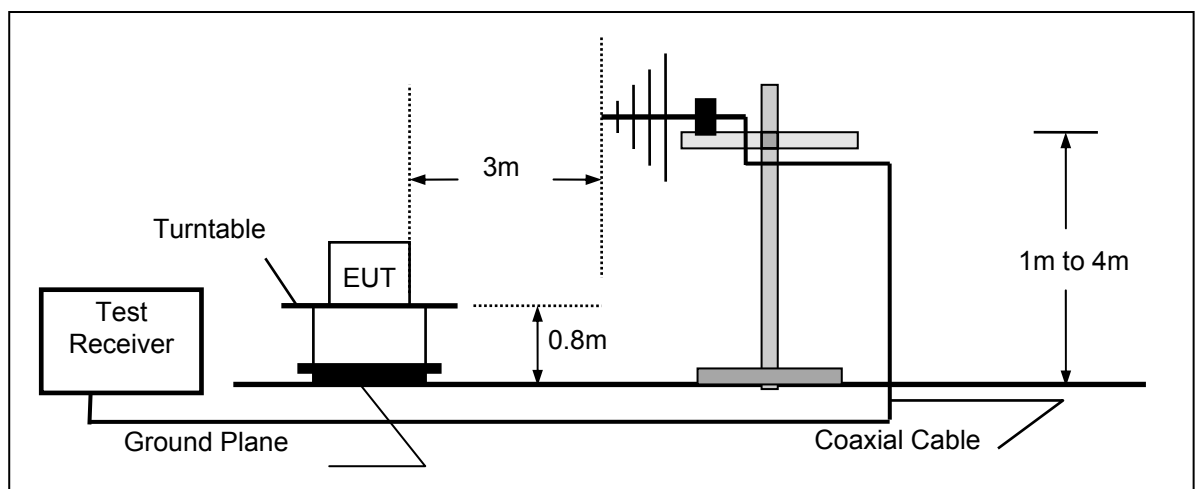
The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:

$$FS = RA + AF + CL - AG$$

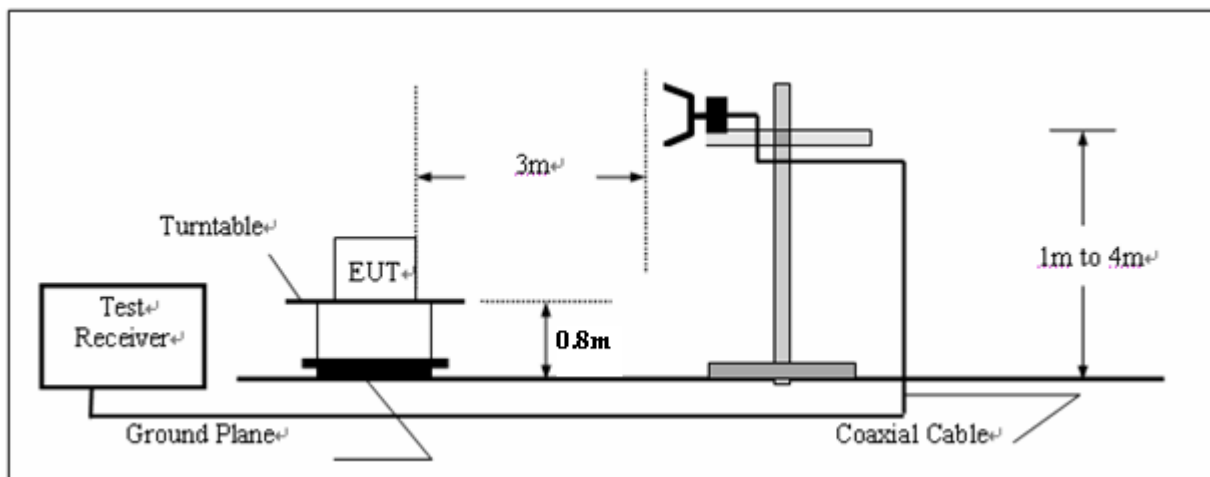
Where FS = Field Strength	CL = Cable Attenuation Factor (Cable Loss)
RA = Reading Amplitude	AG = Amplifier Gain
AF = Antenna Factor	

TEST CONFIGURATION

(A) Radiated Emission Test Set-Up, Frequency below 1000MHz



(B) Radiated Emission Test Set-Up, Frequency above 1000MHz



TEST PROCEDURE

- 1 The EUT was placed on a turn table which is 0.8m above ground plane.
- 2 Maximum procedure was performed by raising the receiving antenna from 1m to 4m and rotating the turn table from 0° to 360° to acquire the highest emissions from EUT
- 3 And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
- 4 Repeat above procedures until all frequency measurements have been completed.

RECEIVER RADIATED SPOUIOUS LIMIT

For unintentional device, according to § 15.109(a) and RSS-Gen, except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency (MHz)	Distance (Meters)	Radiated (dBµV/m)	Radiated (µV/m)
30-88	3	40.0	100
88-216	3	43.5	150
216-960	3	46.0	200
Above 960	3	54.0	500

For intentional device, according to § 15.209(a), the general requirement of field strength of radiated emissions from intentional radiators at a distance of 3 meters shall not exceed the above table.

TEST RESULTS

Remak:

- 1.The Radiated Measurement (Standby mode /Receiver mode) are performed to the three channels (the high channel, the middle channel and the low channel), the datum recorded below is the worst case for each channel separation;and the EUT shall be scanned from 30 MHz to the 5th harmonic of the highest oscillator frequency in the digital devices or 1 GHz whichever is higher.
- 2.Test performed at Op 5 , Op 6 and Op 7 operation mode respectively.And the datum append below is the worst case at 450.5MHz(*Test Frequency*) of each operation mode.

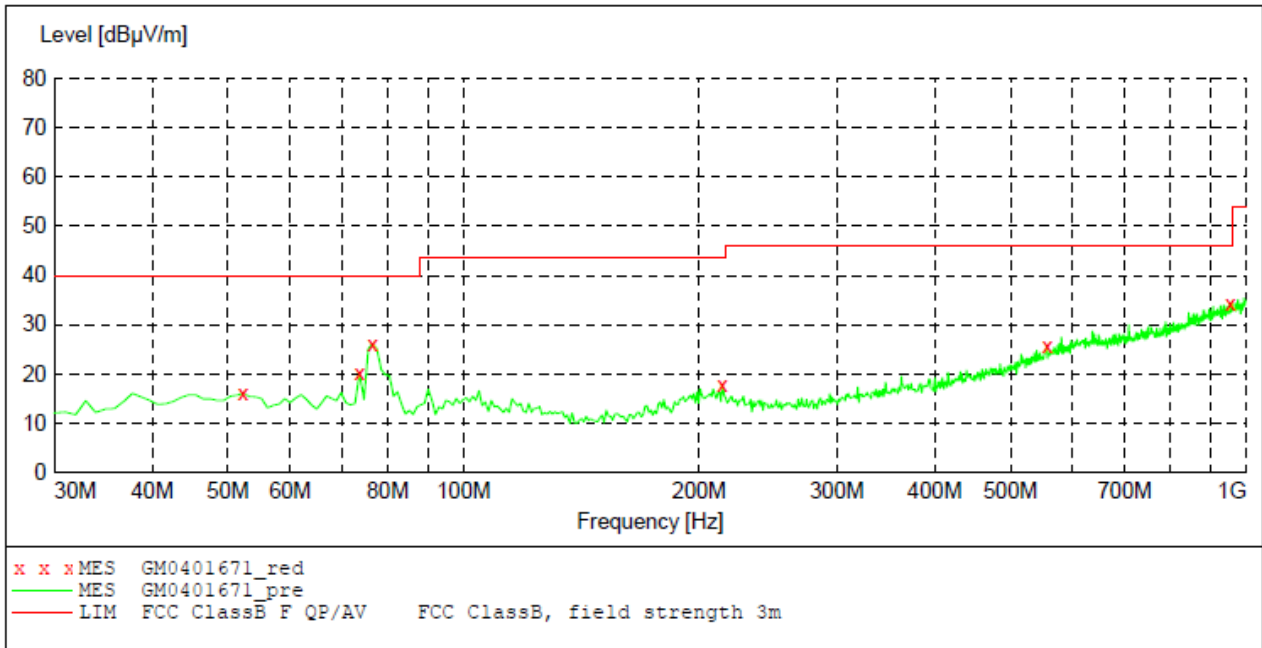
Op 5

Test Frequency:

450.5MHz

Polarity:

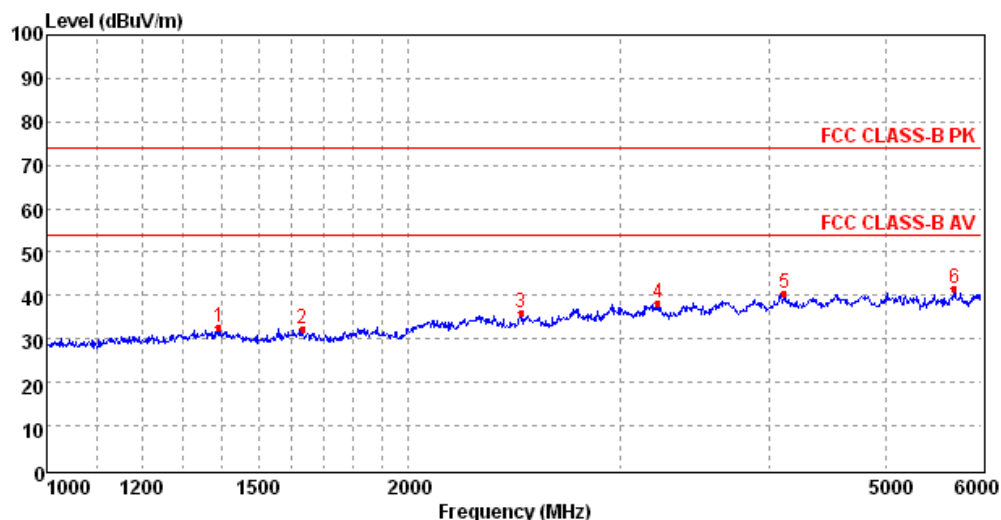
Horizontal



MEASUREMENT RESULT: "GM0401671_red"

4/1/2015 5:02PM

Frequency MHz	Level dBuV/m	Transd dB	Limit dBuV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
52.310000	16.10	-14.4	40.0	23.9	QP	100.0	203.00	HORIZONTAL
73.650000	20.30	-17.6	40.0	19.7	QP	300.0	356.00	HORIZONTAL
76.560000	26.20	-18.1	40.0	13.8	QP	300.0	345.00	HORIZONTAL
214.300000	17.90	-14.2	43.5	25.6	QP	100.0	114.00	HORIZONTAL
556.710000	25.70	-4.5	46.0	20.3	QP	100.0	3.00	HORIZONTAL
954.410000	34.30	3.8	46.0	11.7	QP	300.0	182.00	HORIZONTAL



Mark	Frequency MHz	Level dBuV/m	Factor dB	Reading dBuV/m	Limit dBuV/m	Margin dB	Polarization	Det.
1	1390.53	32.58	-8.08	40.66	74.00	41.42	HORIZONTAL	Peak
2	1630.93	32.51	-8.38	40.89	74.00	41.49	HORIZONTAL	Peak
3	2480.41	36.03	-5.22	41.25	74.00	37.97	HORIZONTAL	Peak
4	3227.83	38.45	-2.84	41.29	74.00	35.55	HORIZONTAL	Peak
5	4111.13	40.46	0.03	40.43	74.00	33.54	HORIZONTAL	Peak
6	5696.20	41.66	3.62	38.04	74.00	32.34	HORIZONTAL	Peak

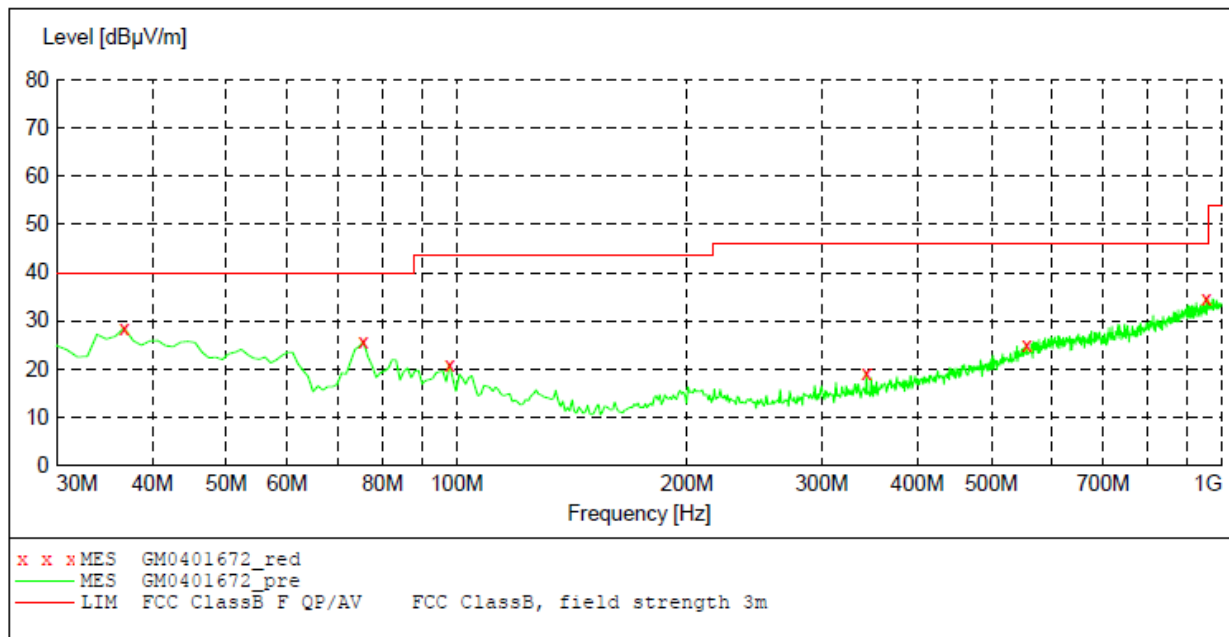
Op 5

Test Frequency:

450.5MHz

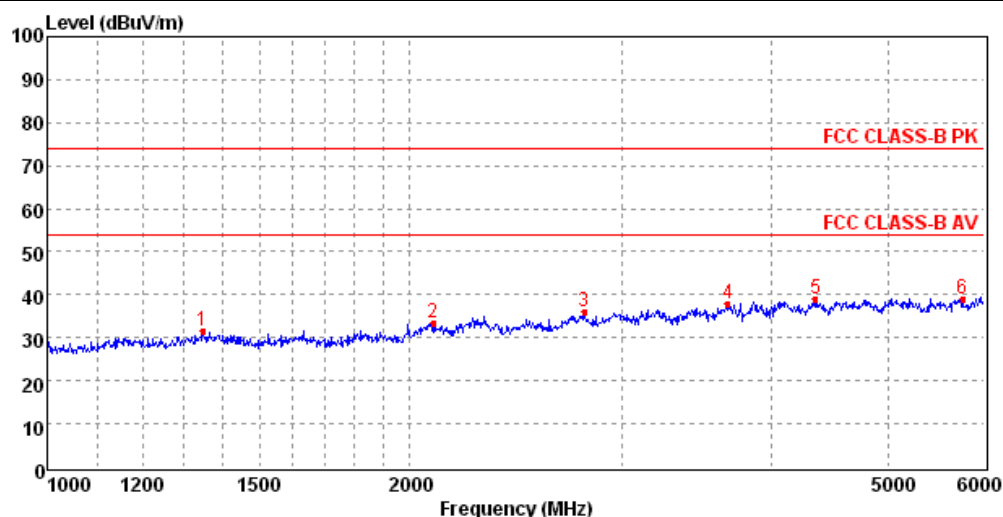
Polarity:

Vertical

**MEASUREMENT RESULT: "GM0401672_red"**

4/1/2015 5:06PM

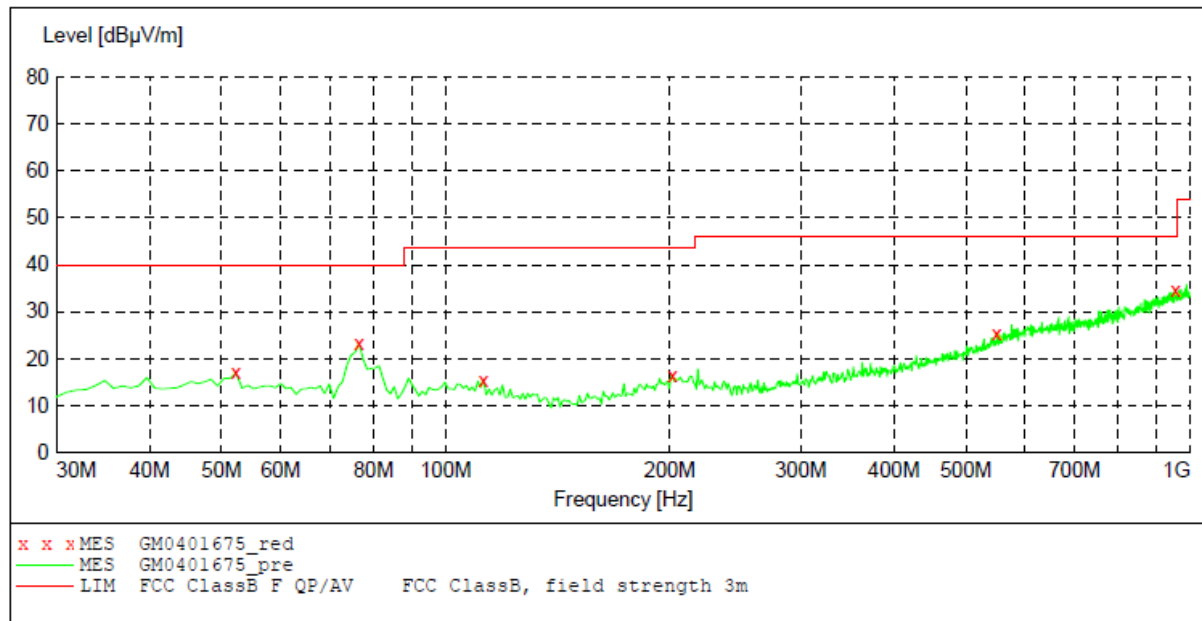
Frequency MHz	Level dBuV/m	Transd dB	Limit dBuV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
36.790000	28.60	-15.8	40.0	11.4	QP	100.0	0.00	VERTICAL
75.590000	25.70	-17.9	40.0	14.3	QP	100.0	170.00	VERTICAL
97.900000	21.00	-14.7	43.5	22.5	QP	100.0	350.00	VERTICAL
343.310000	19.40	-12.4	46.0	26.6	QP	100.0	276.00	VERTICAL
555.740000	24.90	-4.6	46.0	21.1	QP	100.0	320.00	VERTICAL
954.410000	34.70	3.8	46.0	11.3	QP	100.0	124.00	VERTICAL



Mark	Frequency MHz	Level dBuV/m	Factor dB	Reading dBuV/m	Limit dBuV/m	Margin dB	Polarization	Det.
1	1346.40	31.51	-8.02	39.53	74.00	42.49	VERTICAL	Peak
2	2092.18	33.49	-5.99	39.48	74.00	40.51	VERTICAL	Peak
3	2791.78	36.24	-3.85	40.09	74.00	37.76	VERTICAL	Peak
4	3678.88	38.02	-1.50	39.52	74.00	35.98	VERTICAL	Peak
5	4345.94	39.04	0.73	38.31	74.00	34.96	VERTICAL	Peak
6	5757.76	39.14	3.90	35.24	74.00	34.86	VERTICAL	Peak

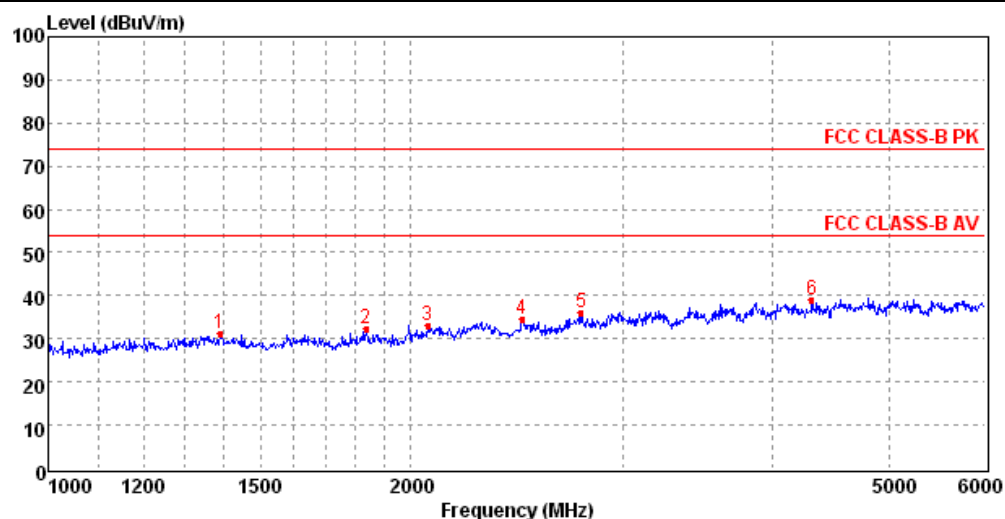
Op 6

Test Frequency: 450.5MHz Polarity: Horizontal

**MEASUREMENT RESULT: "GM0401675_red"**

4/1/2015 5:18PM

Frequency MHz	Level dBuV/m	Transd dB	Limit dBuV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
52.310000	17.00	-14.4	40.0	23.0	QP	100.0	40.00	HORIZONTAL
76.560000	23.20	-18.1	40.0	16.8	QP	300.0	360.00	HORIZONTAL
112.450000	15.60	-15.3	43.5	27.9	QP	100.0	0.00	HORIZONTAL
201.690000	16.60	-13.7	43.5	26.9	QP	300.0	307.00	HORIZONTAL
549.920000	25.30	-4.8	46.0	20.7	QP	300.0	89.00	HORIZONTAL
955.380000	34.60	3.8	46.0	11.4	QP	100.0	6.00	HORIZONTAL



Mark	Frequency MHz	Level dBuV/m	Factor dB	Reading dBuV/m	Limit dBuV/m	Margin dB	Polarization	Det.
1	1388.04	31.27	-8.07	39.34	74.00	42.73	HORIZONTAL	Peak
2	1835.66	32.39	-8.11	40.50	74.00	41.61	HORIZONTAL	Peak
3	2066.10	33.18	-6.30	39.48	74.00	40.82	HORIZONTAL	Peak
4	2475.97	34.66	-5.23	39.89	74.00	39.34	HORIZONTAL	Peak
5	2771.84	36.24	-3.95	40.19	74.00	37.76	HORIZONTAL	Peak
6	4307.18	39.02	0.60	38.42	74.00	34.98	HORIZONTAL	Peak

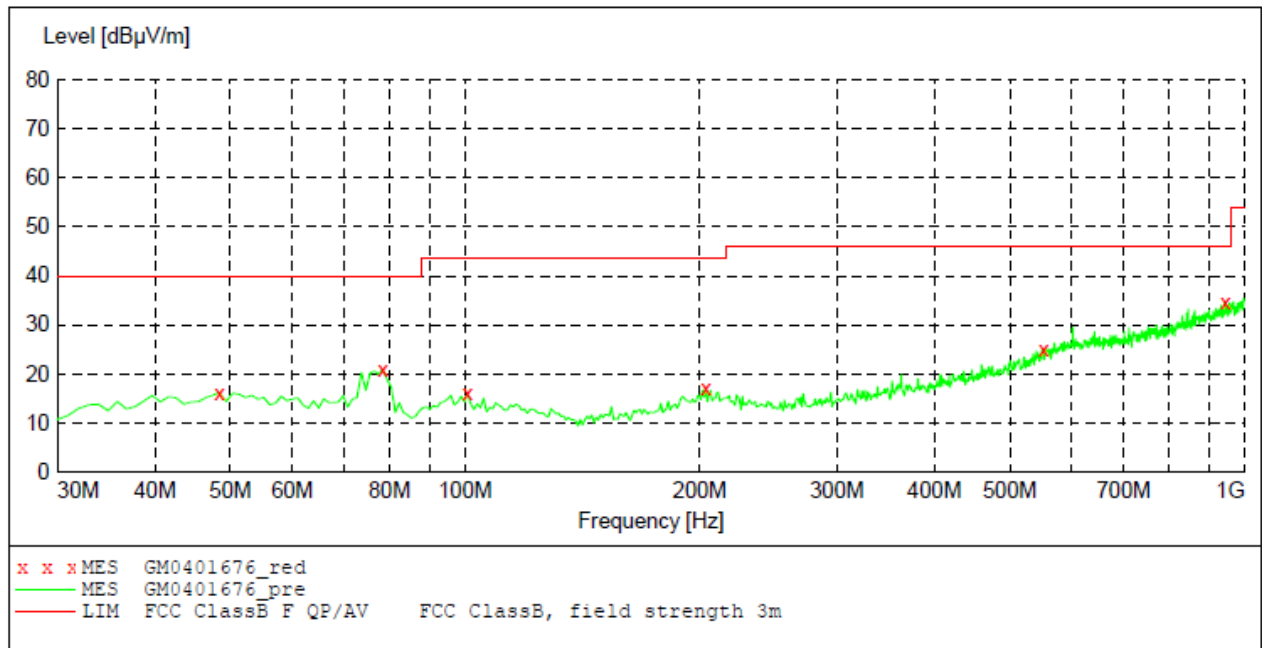
Op 6

Test Frequency:

450.5MHz

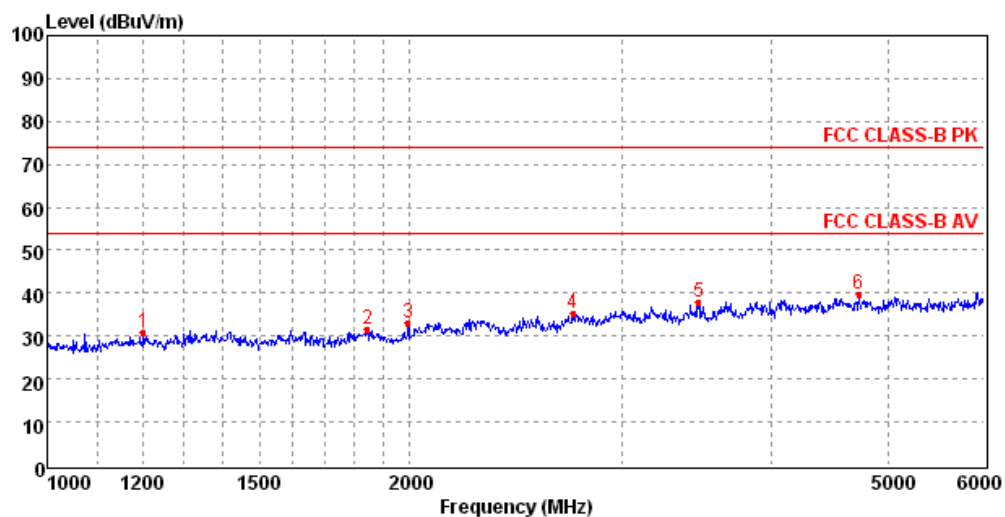
Polarity:

Vertical

**MEASUREMENT RESULT: "GM0401676_red"**

4/1/2015 5:21PM

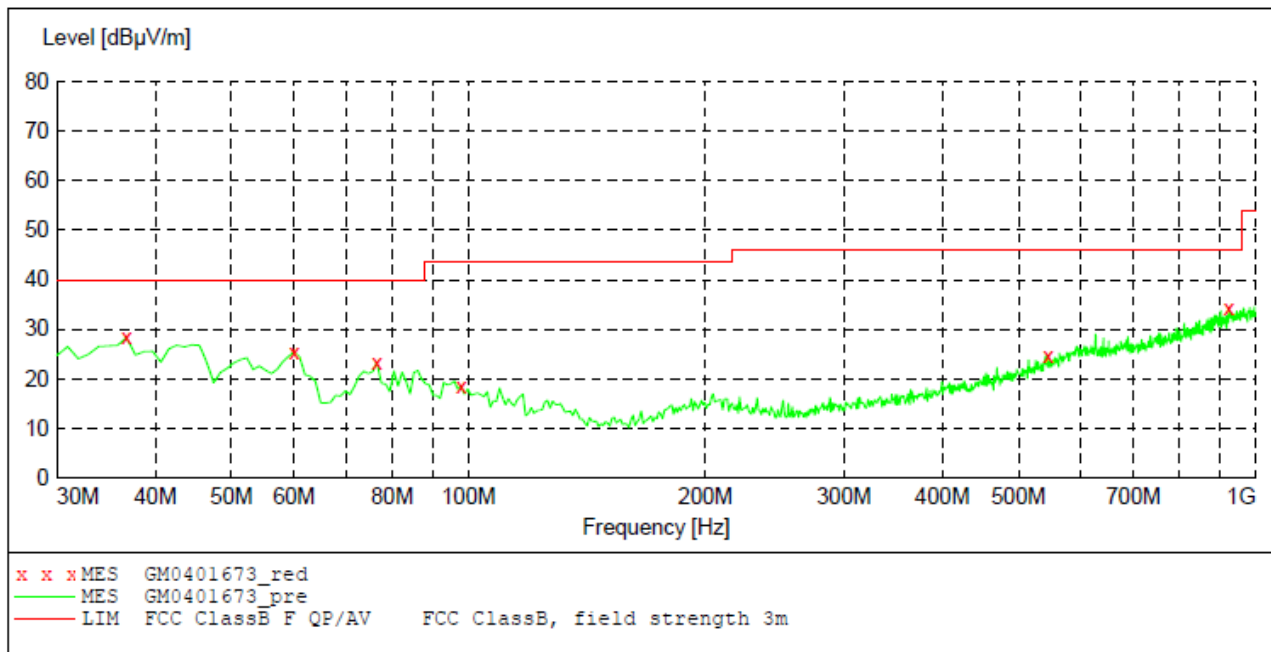
Frequency MHz	Level dBuV/m	Transd dB	Limit dBuV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
48.430000	16.30	-14.4	40.0	23.7	QP	100.0	83.00	VERTICAL
78.500000	21.00	-18.4	40.0	19.0	QP	300.0	154.00	VERTICAL
100.810000	16.00	-14.3	43.5	27.5	QP	300.0	360.00	VERTICAL
203.630000	17.20	-13.7	43.5	26.3	QP	100.0	335.00	VERTICAL
552.830000	25.20	-4.7	46.0	20.8	QP	300.0	360.00	VERTICAL
945.680000	34.60	3.6	46.0	11.4	QP	100.0	53.00	VERTICAL



Mark	Frequency MHz	Level dBuV/m	Factor dB	Reading dBuV/m	Limit dBuV/m	Margin dB	Polarization	Det.
1	1202.68	30.99	-8.86	39.85	74.00	43.01	VERTICAL	Peak
2	1845.56	31.61	-8.06	39.67	74.00	42.39	VERTICAL	Peak
3	1993.37	32.98	-7.15	40.13	74.00	41.02	VERTICAL	Peak
4	2732.39	35.33	-4.15	39.48	74.00	38.67	VERTICAL	Peak
5	3473.88	37.77	-2.40	40.17	74.00	36.23	VERTICAL	Peak
6	4719.32	39.60	2.00	37.60	74.00	34.40	VERTICAL	Peak

Op 7

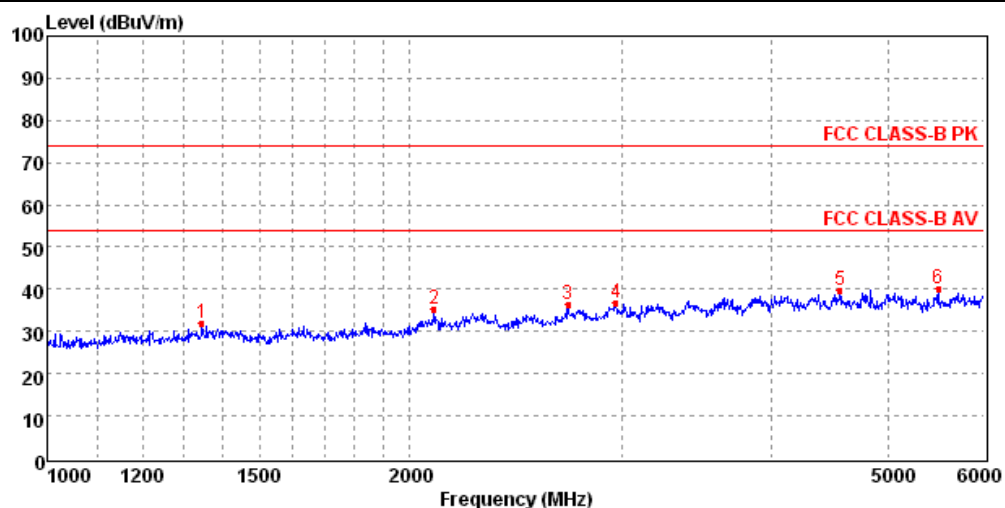
Test Frequency: 1575.42MHz Polarity: Horizontal



MEASUREMENT RESULT: "GM0401673_red"

4/1/2015 5:13PM

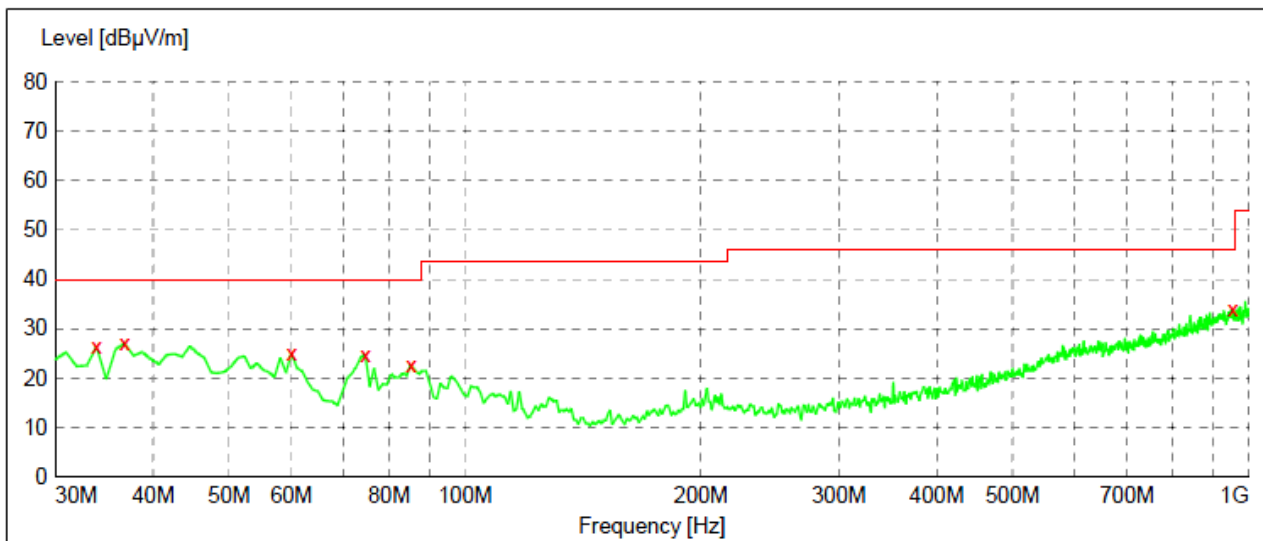
Frequency MHz	Level dBuV/m	Transd dB	Limit dBuV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
36.790000	28.30	-15.8	40.0	11.7	QP	100.0	175.00	HORIZONTAL
60.070000	25.50	-14.9	40.0	14.5	QP	100.0	0.00	HORIZONTAL
76.560000	23.30	-18.1	40.0	16.7	QP	100.0	356.00	HORIZONTAL
97.900000	18.70	-14.7	43.5	24.8	QP	100.0	299.00	HORIZONTAL
545.070000	24.80	-5.1	46.0	21.2	QP	100.0	314.00	HORIZONTAL
925.310000	34.30	3.2	46.0	11.7	QP	100.0	144.00	HORIZONTAL



Mark	Frequency MHz	Level dBuV/m	Factor dB	Reading dBuV/m	Limit dBuV/m	Margin dB	Polarization	Det.
1	1343.99	31.91	-8.01	39.92	74.00	42.09	HORIZONTAL	Peak
2	2095.93	35.33	-5.95	41.28	74.00	38.67	HORIZONTAL	Peak
3	2708.02	36.29	-4.28	40.57	74.00	37.71	HORIZONTAL	Peak
4	2967.14	36.86	-3.34	40.20	74.00	37.14	HORIZONTAL	Peak
5	4553.19	39.74	1.26	38.48	74.00	34.26	HORIZONTAL	Peak
6	5495.69	40.18	3.46	36.72	74.00	33.82	HORIZONTAL	Peak

Op 7

Test Frequency: 1575.42MHz Polarity: Vertical

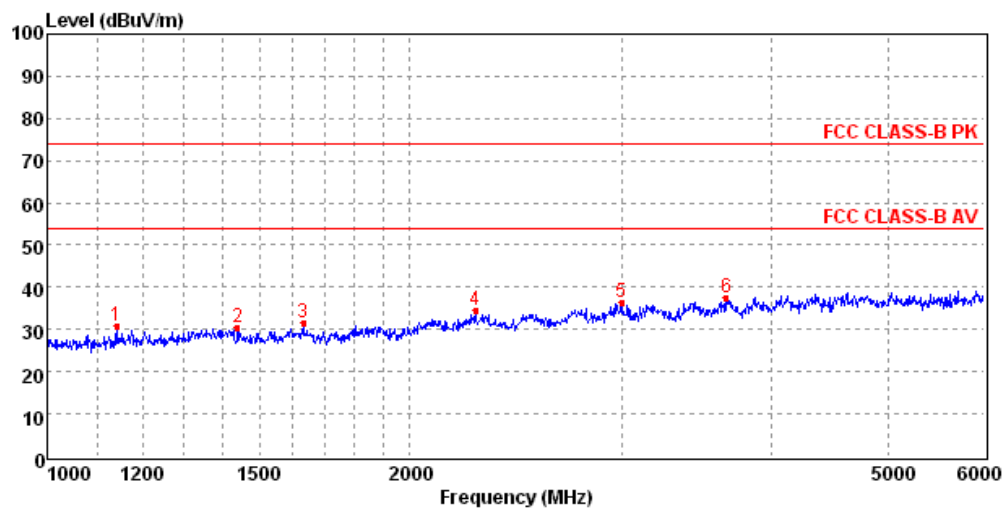


x x x MES GM0401674_red
 — MES GM0401674_pre
 — LIM FCC ClassB F QP/AV FCC ClassB, field strength 3m

MEASUREMENT RESULT: "GM0401674_red"

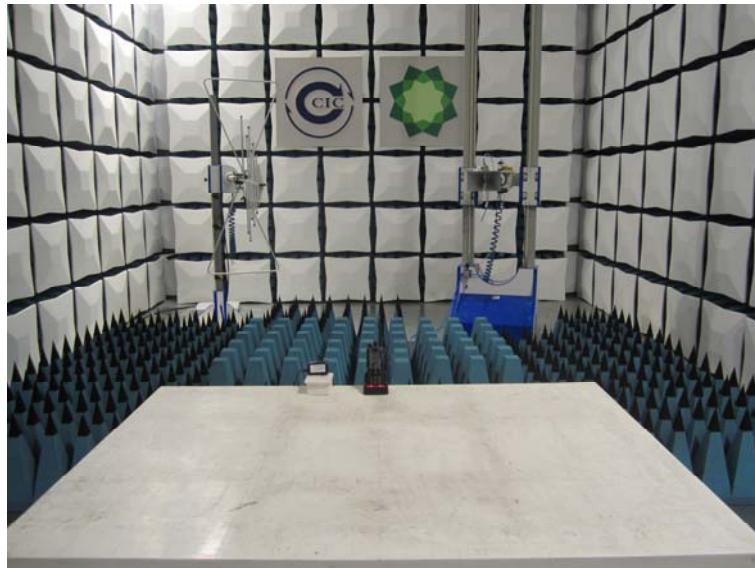
4/1/2015 5:15PM

Frequency MHz	Level dBuV/m	Transd dB	Limit dBuV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
33.880000	26.40	-16.2	40.0	13.6	QP	100.0	352.00	VERTICAL
36.790000	27.10	-15.8	40.0	12.9	QP	100.0	352.00	VERTICAL
60.070000	25.10	-14.9	40.0	14.9	QP	100.0	22.00	VERTICAL
74.620000	24.80	-17.8	40.0	15.2	QP	100.0	225.00	VERTICAL
85.290000	22.80	-17.3	40.0	17.2	QP	100.0	307.00	VERTICAL
954.410000	33.90	3.8	46.0	12.1	QP	100.0	0.00	VERTICAL



Mark	Frequency MHz	Level dBuV/m	Factor dB	Reading dBuV/m	Limit dBuV/m	Margin dB	Polarization	Det.
1	1141.78	30.77	-9.43	40.20	74.00	43.23	VERTICAL	Peak
2	1438.68	30.54	-8.19	38.73	74.00	43.46	VERTICAL	Peak
3	1630.93	31.44	-8.38	39.82	74.00	42.56	VERTICAL	Peak
4	2267.85	34.58	-4.97	39.55	74.00	39.42	VERTICAL	Peak
5	2999.21	36.50	-3.34	39.84	74.00	37.50	VERTICAL	Peak
6	3665.72	37.42	-1.54	38.96	74.00	36.58	VERTICAL	Peak

5. Test Setup Photos of the EUT





6. External and Internal Photos of the EUT

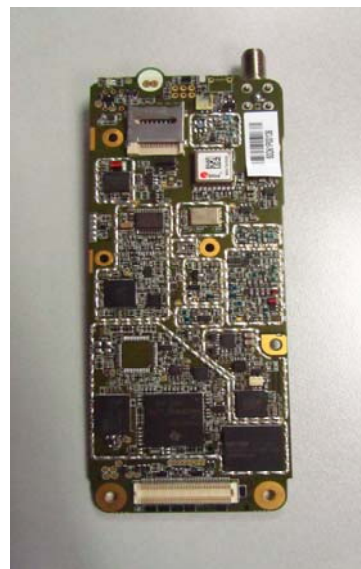
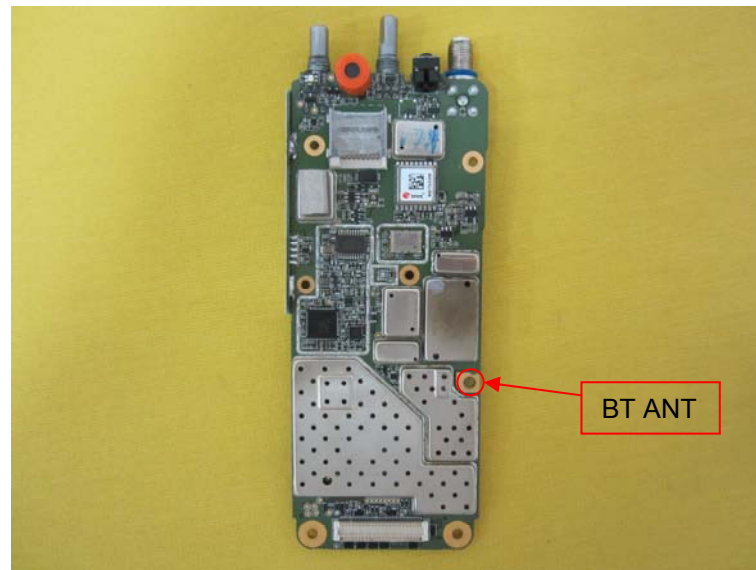
External photos of the EUT





Internal photos of the EUT







.....End of Report.....