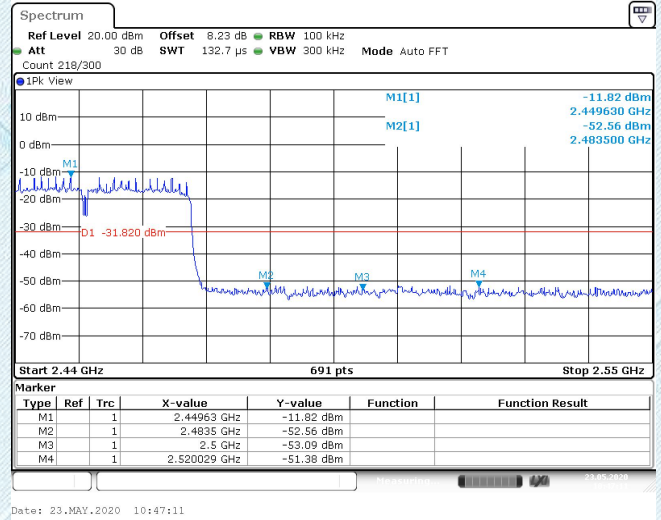
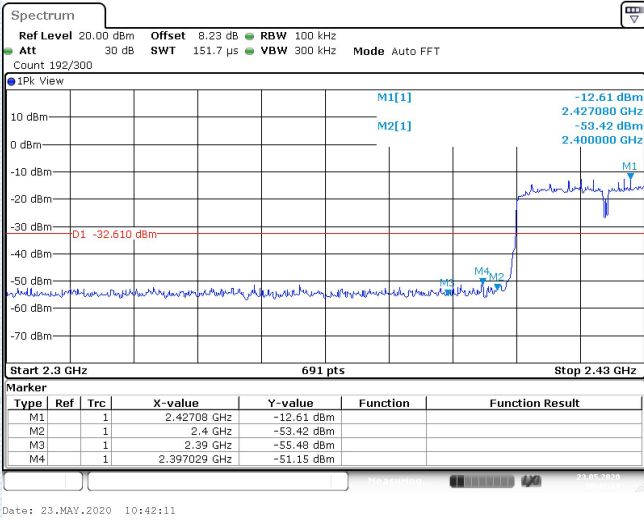


802.11n(HT40)

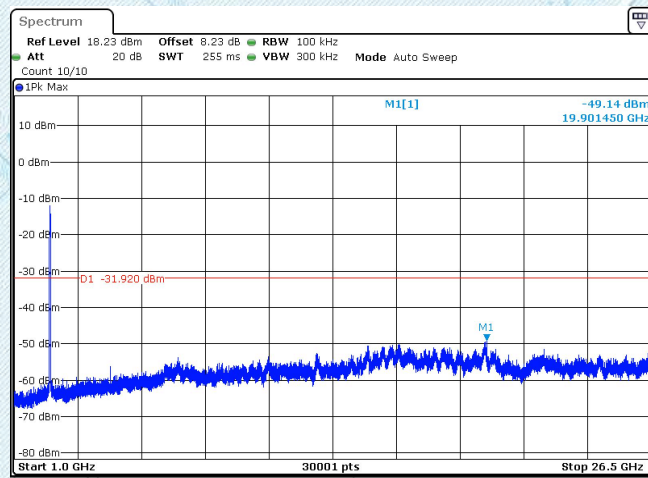
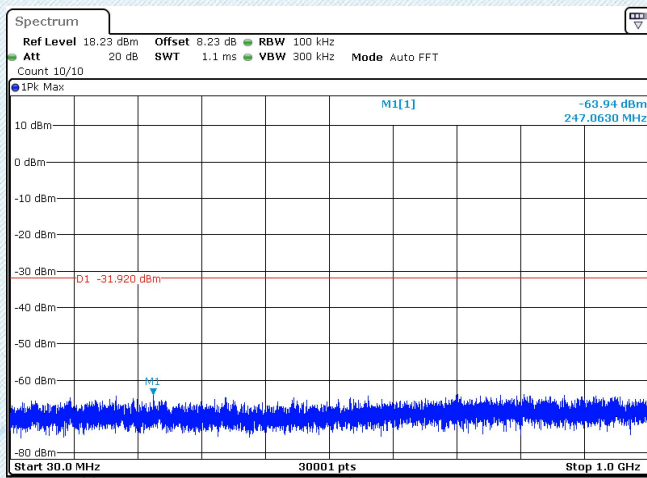
CH03-Bandedge

CH09-Bandedge

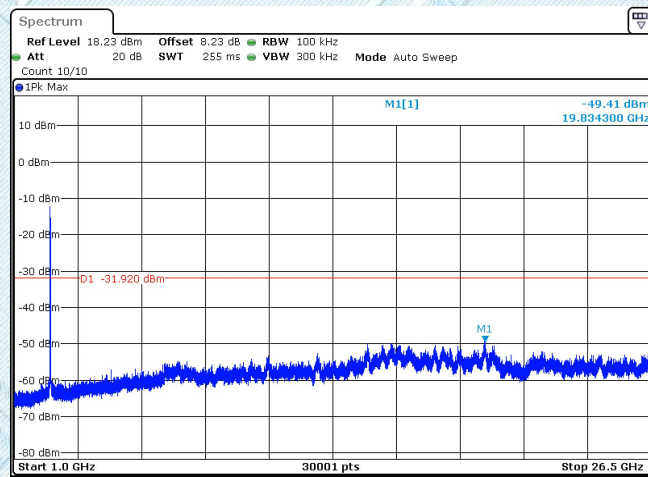
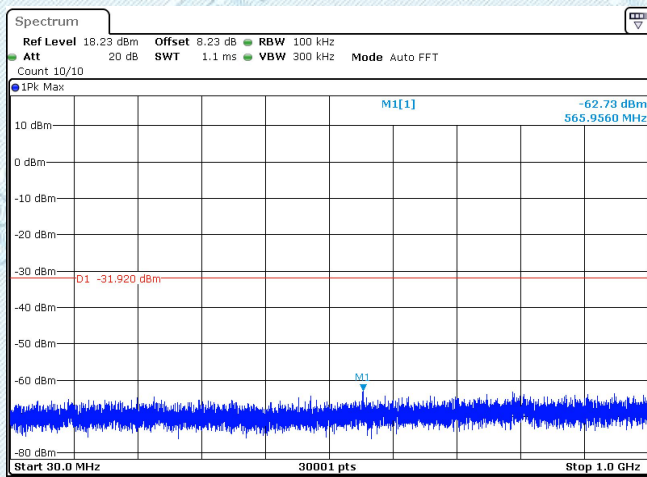


802.11n(HT40)

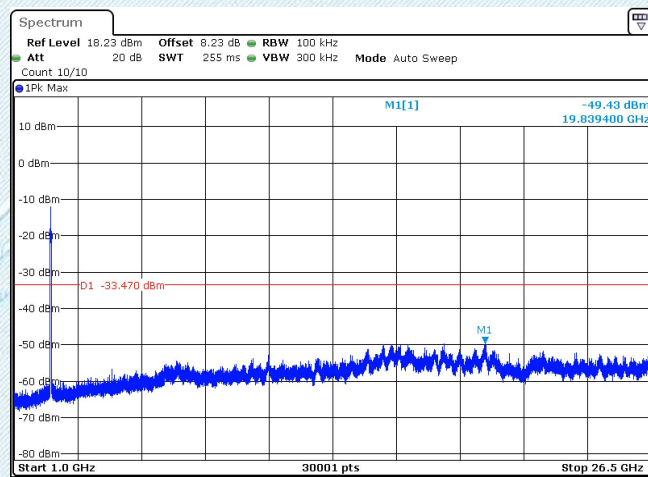
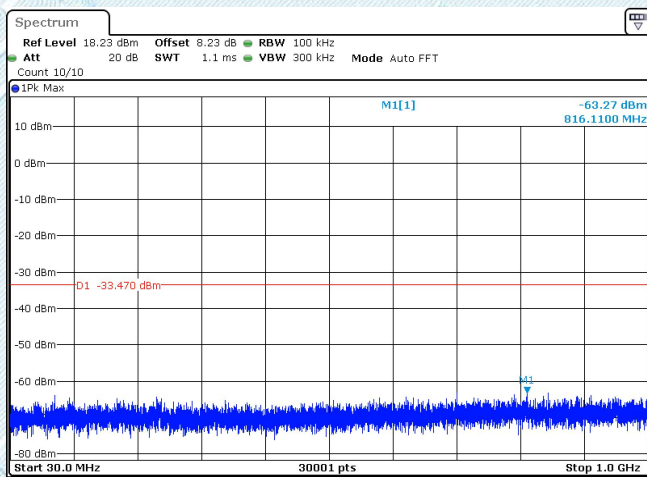
CH03-SE



CH06-SE



CH09-SE



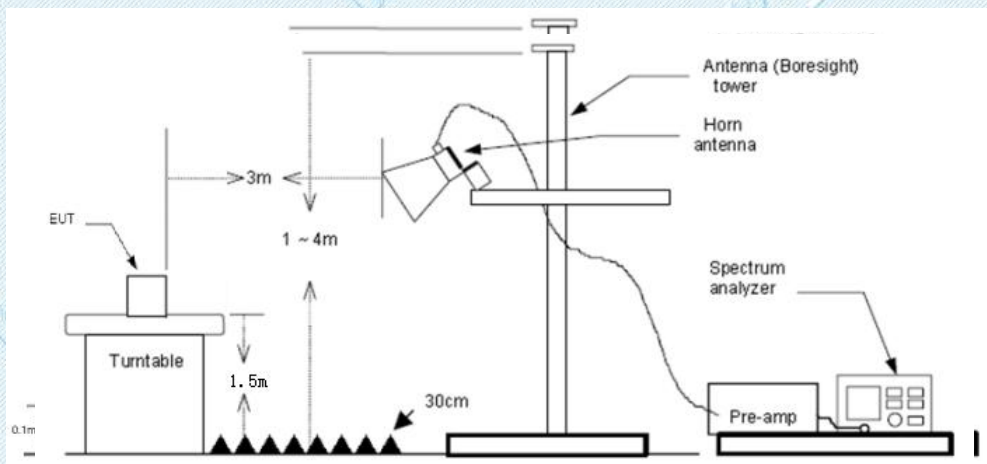
### 3.7. Band Edge Emissions(Radiated)

**Limit**

Restricted Frequency Band (MHz)	(dBuV/m)(at 3m)	
	Peak	Average
2310 ~2390	74	54
2483.5 ~2500	74	54

**Note: All restriction bands have been tested, only the worst case is reported.**

**Test Configuration**



**Test Procedure**

1. The EUT was setup and tested according to ANSI C63.10:2013 requirements.
2. The EUT is placed on a turn table which is 1.5 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
3. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.
4. The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10:2013 on radiated measurement.
5. The receiver set as follow:  
 RBW=1MHz, VBW=3MHz PEAK detector for Peak value.  
 RBW=1MHz, VBW=10Hz with Average detector for Average Value.

**Test Mode**

Please refer to the clause 2.3.

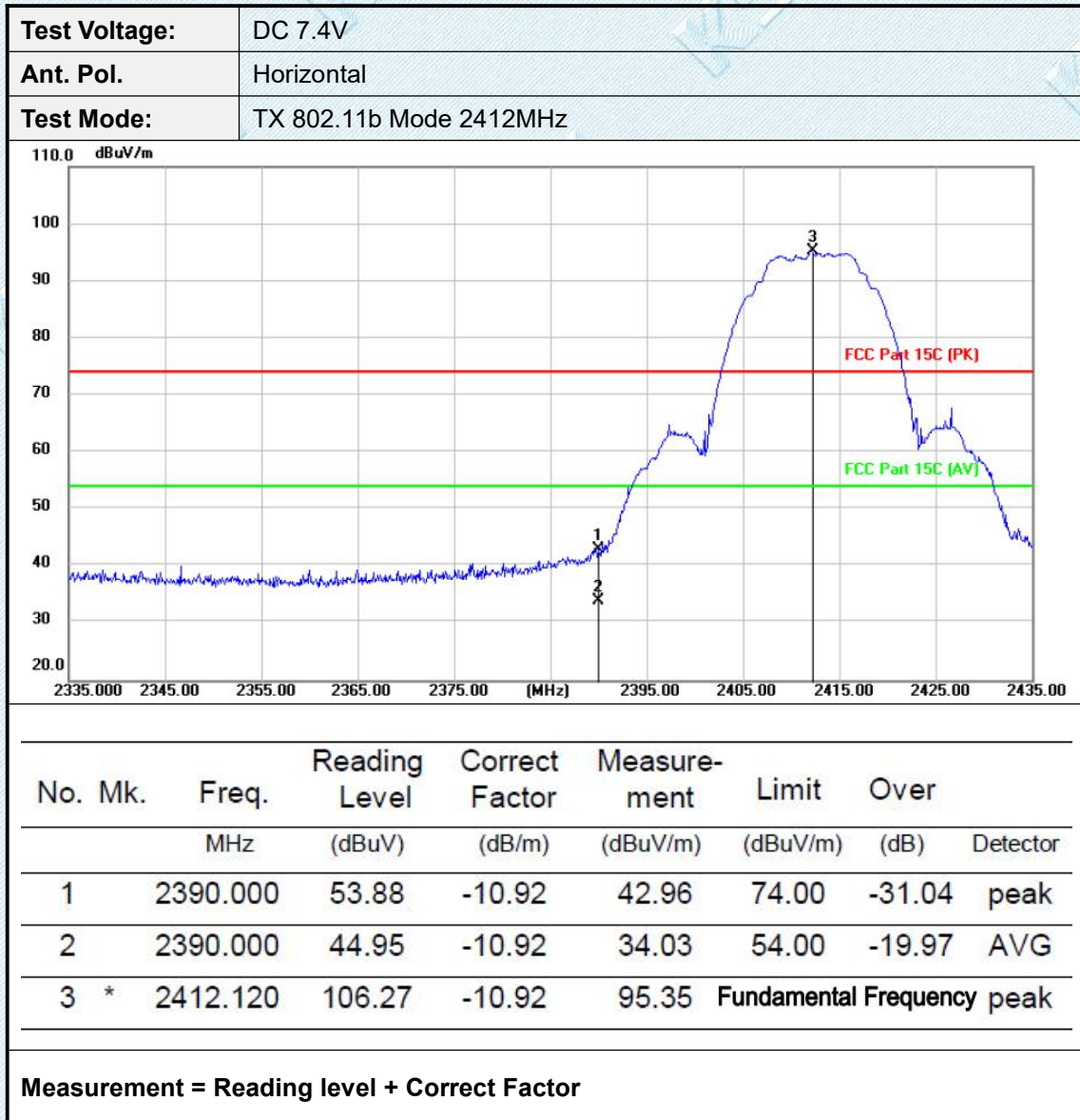
**Test Results**

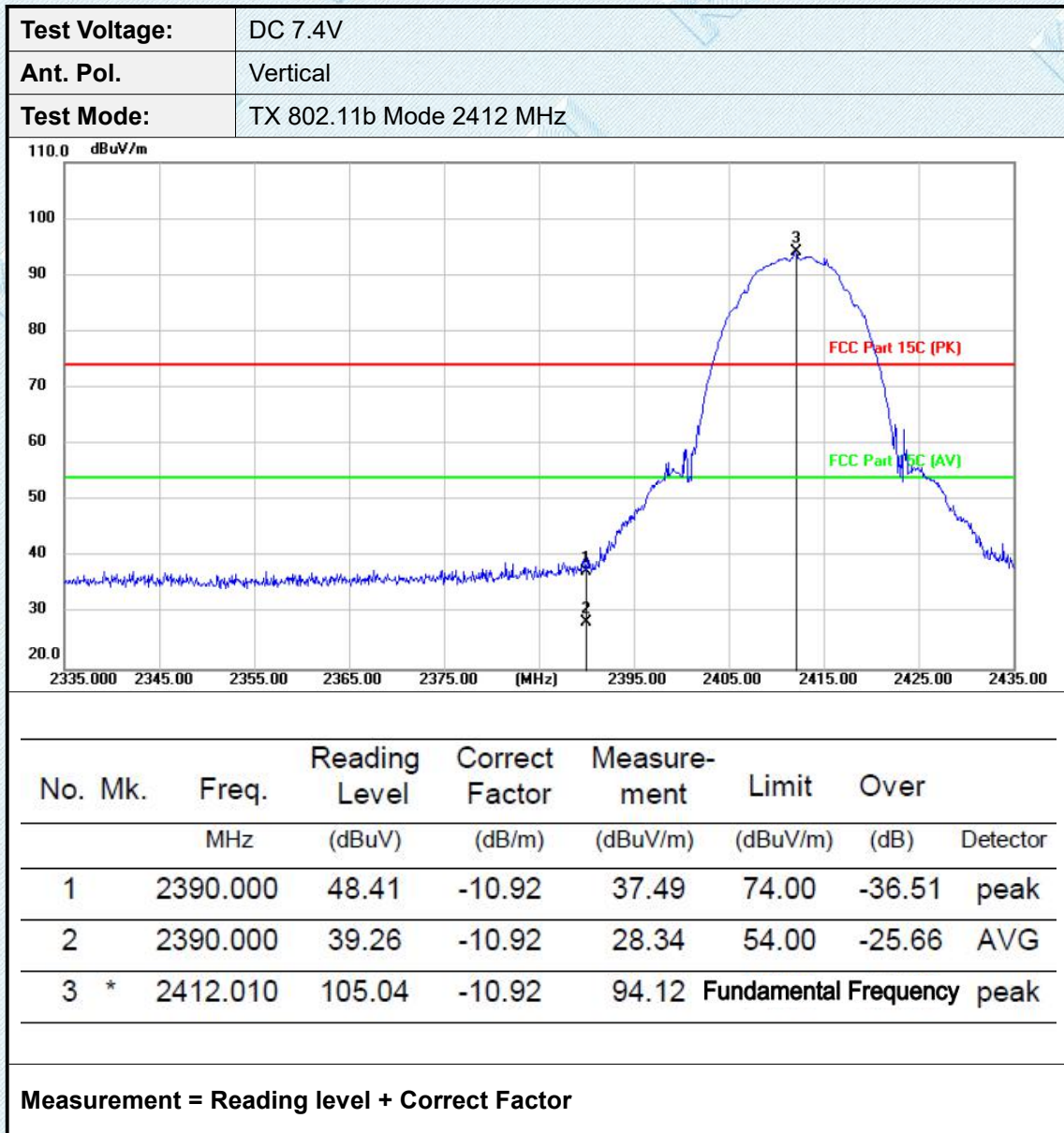
Note:

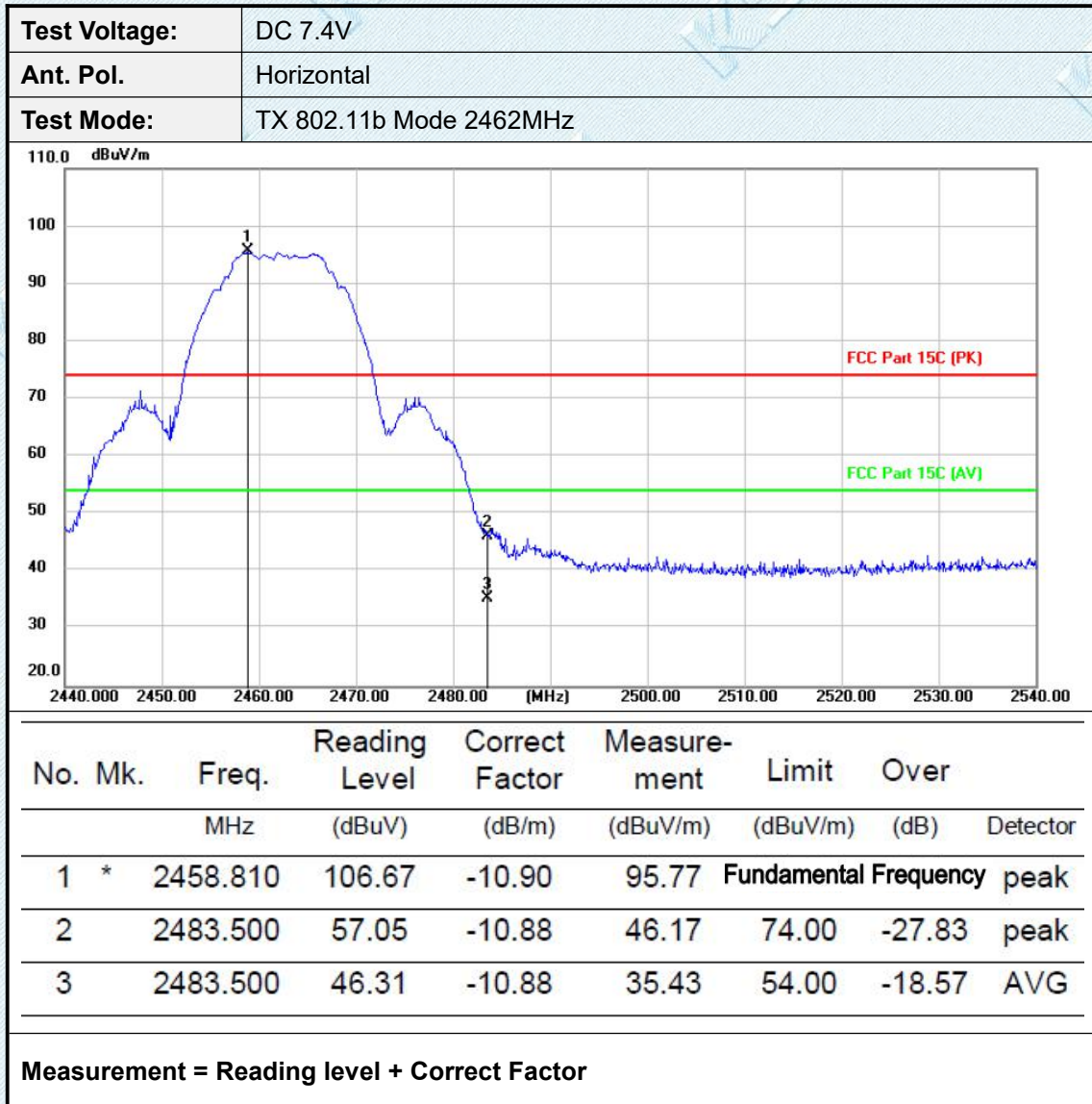
1.Measurement = Reading level + Correct Factor

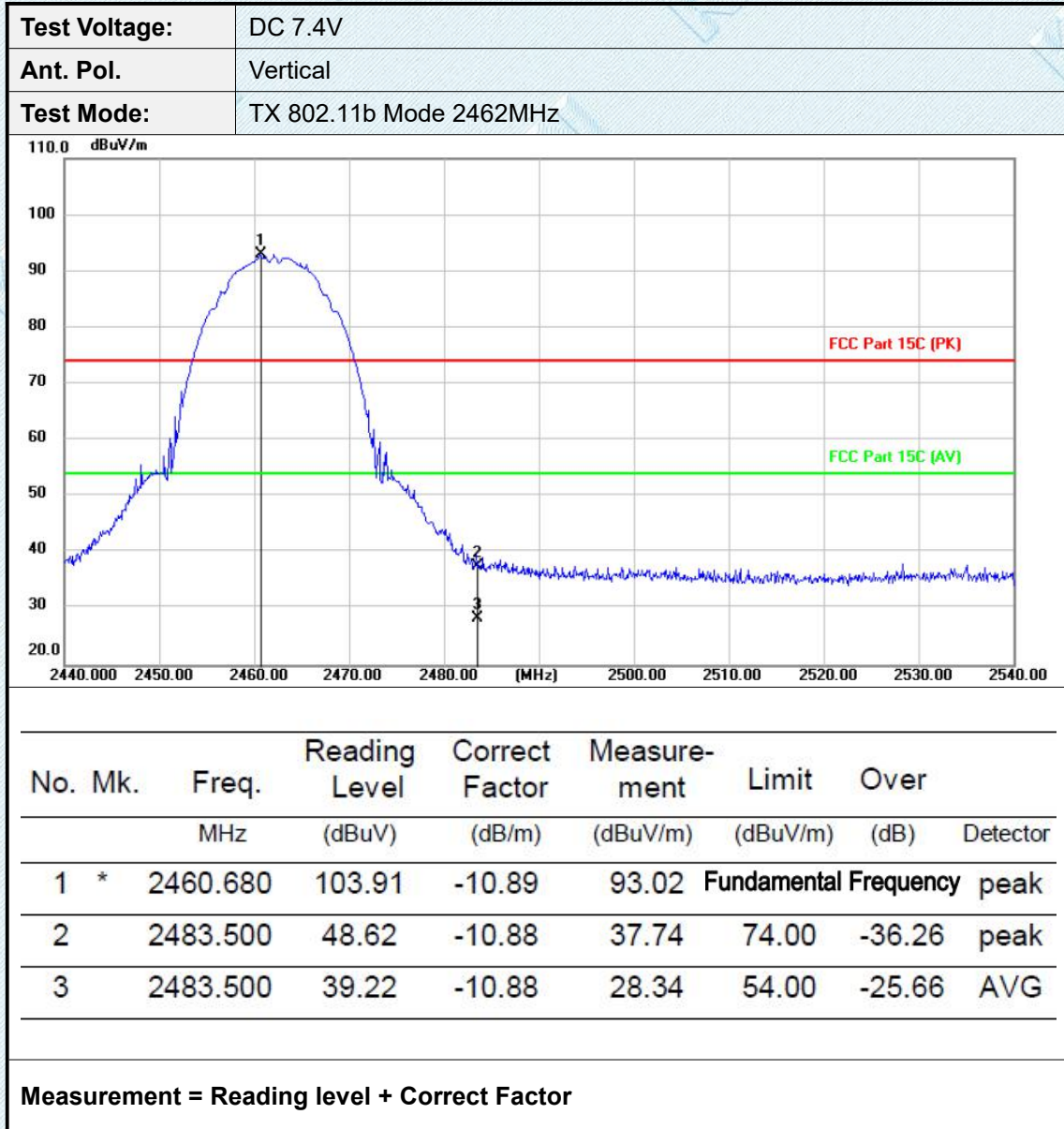
Correct Factor=Antenna Factor + Cable Loss -Preamplifier Factor

- 2.Pre-scan 802.11b, 802.11g, 802.11n(HT20) and 802.11n(HT40) mode, and found the 802.11b mode which it is worse case, so only show the test data for worse case.









### 3.8. Spurious Emission (Radiated)

Limit

**Radiated Emission Limits (9 kHz~1000 MHz)**

Frequency (MHz)	Field Strength (microvolt/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

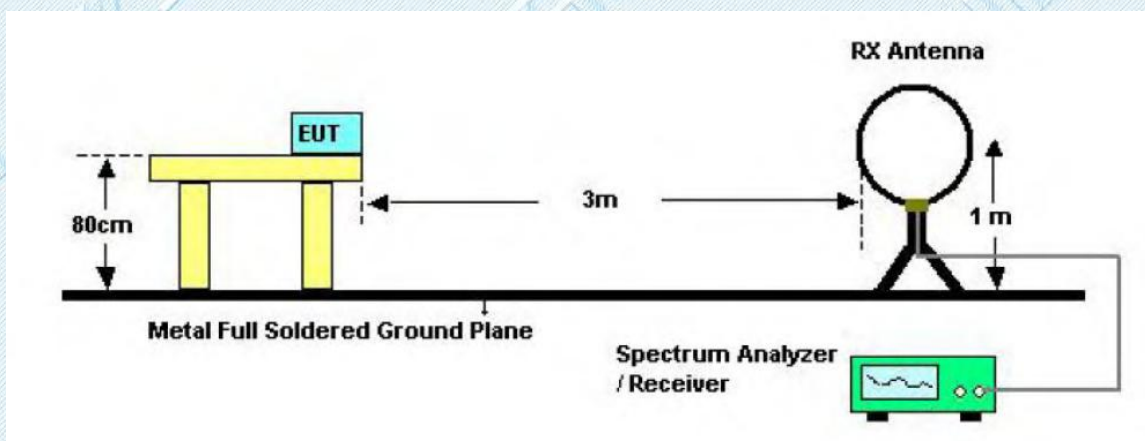
**Radiated Emission Limit (Above 1000MHz)**

Frequency (MHz)	Distance Meters(at 3m)	
	Peak	Average
Above 1000	74	54

**Note:**

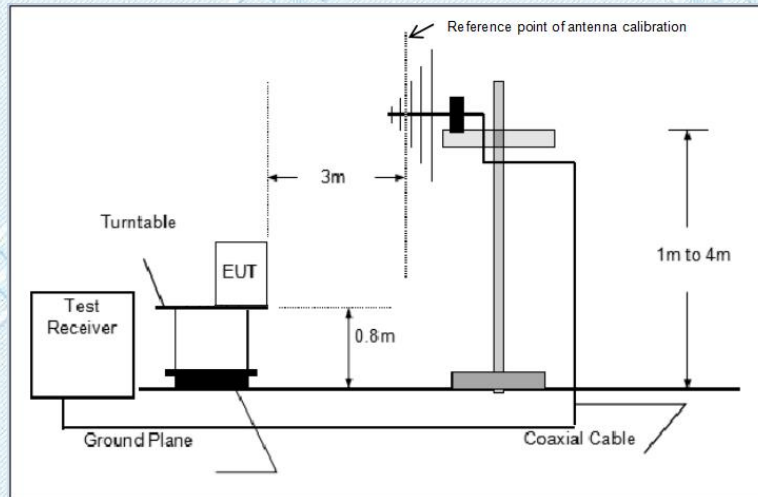
- (1) The tighter limit applies at the band edges.
- (2) Emission Level (dBuV/m)=20log Emission Level (uV/m).

Test Configuration

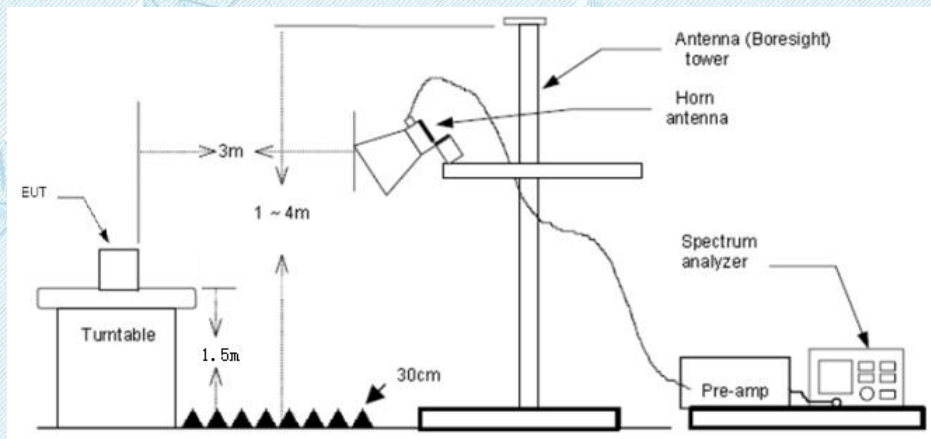


Below 30MHz Test Setup





Below 1000MHz Test Setup



Above 1GHz Test Setup

### Test Procedure

1. The EUT was setup and tested according to ANSI C63.10:2013
2. The EUT is placed on a turn table which is 0.8 meter above ground for below 1 GHz, and 1.5 m for above 1 GHz. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
3. The EUT was set 3 meters from the receiving antenna, which was mounted on the top of a variable height antenna tower.
4. For each suspected emission, the EUT was arranged to its worst case and then tune the Antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level to comply with the guidelines.
5. Set to the maximum power setting and enable the EUT transmit continuously.
6. Use the following spectrum analyzer settings
  - (1) Span shall wide enough to fully capture the emission being measured;
  - (2) Below 1 GHz:  
 RBW=120 kHz, VBW=300 kHz, Sweep=auto, Detector function=peak, Trace=max hold;  
 If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.
  - (3) From 1 GHz to 10<sup>th</sup> harmonic:  
 RBW=1MHz, VBW=1MHz Peak detector for Peak value.  
 RBW=1MHz, VBW=10Hz RMS detector for Average value.

**Test Mode**

Please refer to the clause 2.3.

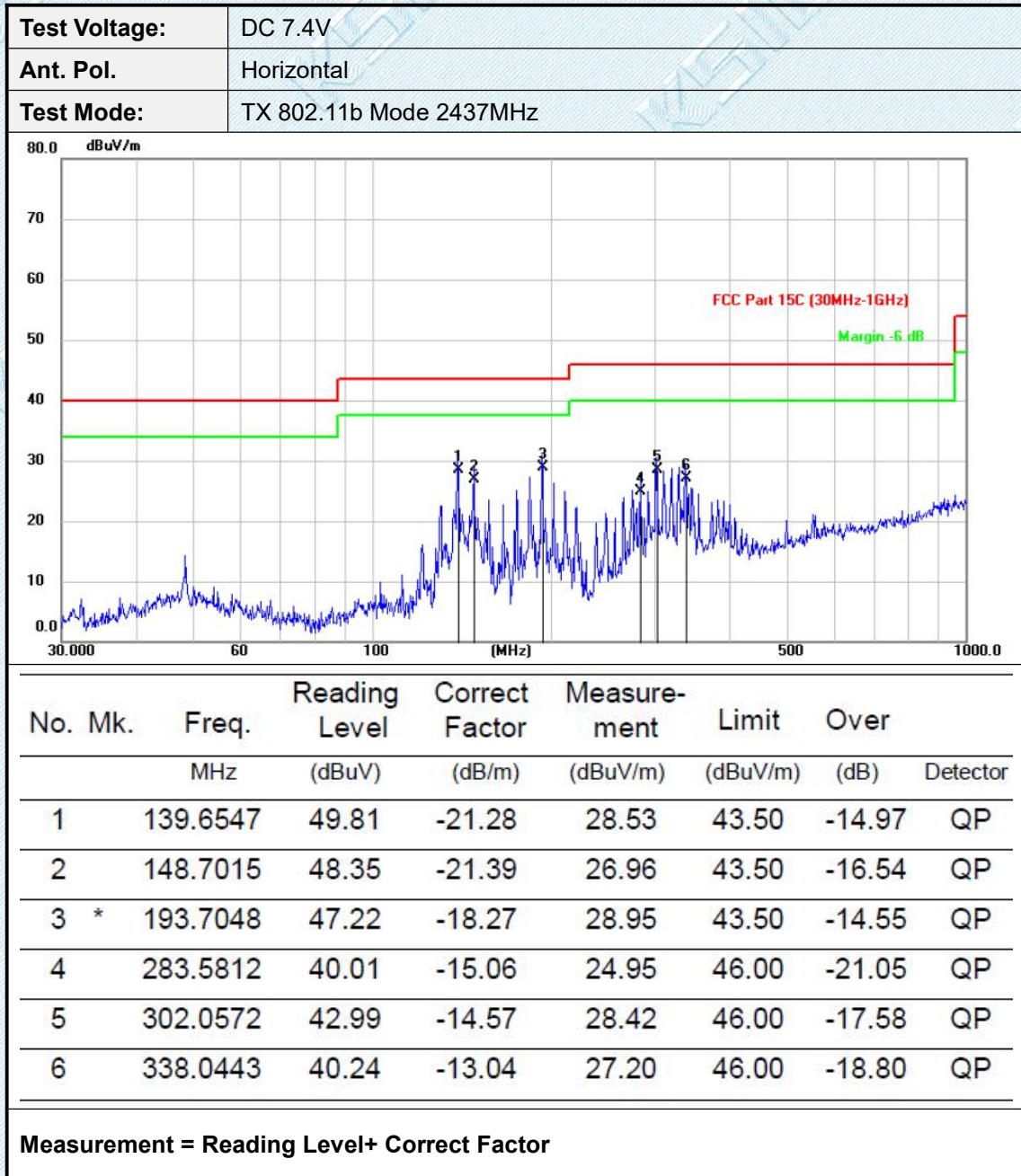
**Test Result****9 KHz~30 MHz and 18GHz~25GHz**

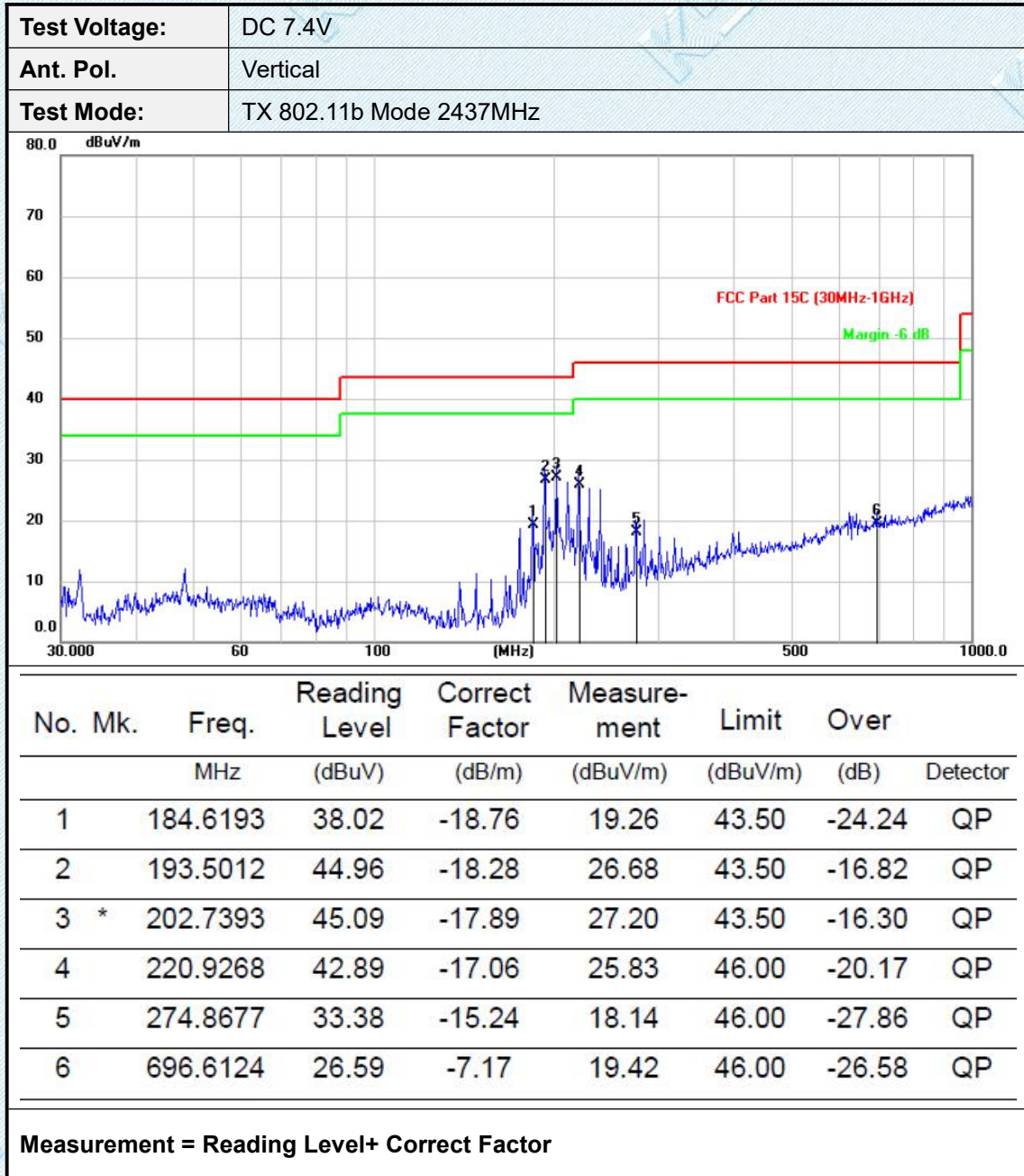
From 9 KHz~30 MHz and 18GHz~25GHz: Conclusion: PASS

Note:

- 1) Measurement = Reading level + Correct Factor  
Correct Factor=Antenna Factor + Cable Loss -Preamplifier Factor
- 2) The peak level is lower than average limit(54 dBuV/m), this data is the too weak instrument of signal is unable to test.
- 3) The emission levels of other frequencies are very lower than the limit and not show in test report.
- 4) The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.
- 5) Pre-scan 802.11b/g/n(HT20/HT40) modulation, and found the 802.11b modulation 2437MHz which it is worse case for 30MHz-1GHz , so only show the test data for worse case.
- 6) Pre-scan 802.11b/g/n(HT20/HT40) modulation, and found the 802.11b modulation which it is worse case for above 1GHz, so only show the test data for worse case.

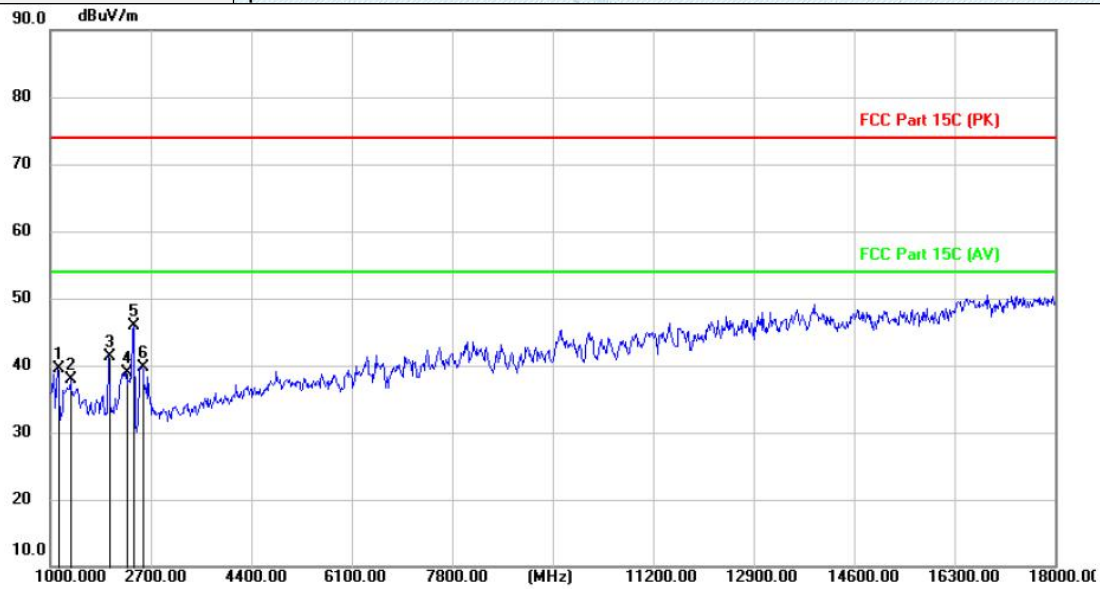
30MHz-1GHz





Adobe 1GHz

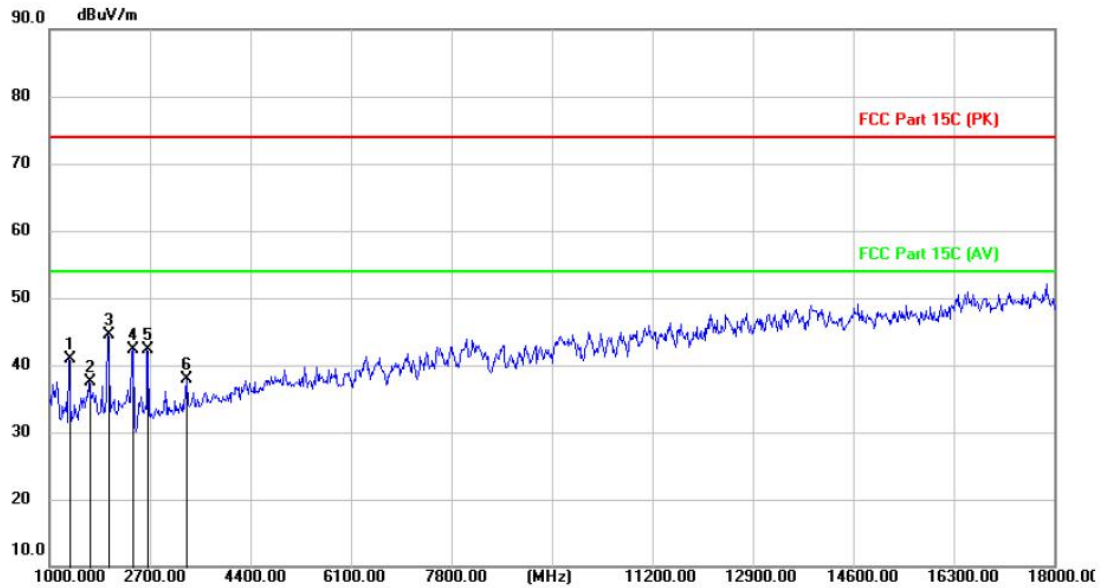
<b>Test Voltage:</b>	DC 7.4V
<b>Ant. Pol.</b>	Horizontal
<b>Test Mode:</b>	TX 802.11b Mode 2412MHz
<b>Remark:</b>	No report for the emission which more than 10 dB below the prescribed limit.



No.	Mk.	Freq. MHz	Reading Level (dBuV)	Correct Factor (dB/m)	Measure- ment (dBuV/m)	Limit (dBuV/m)	Over (dB)	Detector
1		1127.500	51.60	-12.19	39.41	74.00	-34.59	peak
2		1345.100	49.86	-11.95	37.91	74.00	-36.09	peak
3		1996.200	52.46	-11.06	41.40	74.00	-32.60	peak
4		2285.200	49.81	-10.95	38.86	74.00	-35.14	peak
5	*	2411.000	56.79	-10.91	45.88	74.00	-28.12	peak
6		2553.800	50.59	-10.85	39.74	74.00	-34.26	peak

Measurement = Reading level + Correct Factor

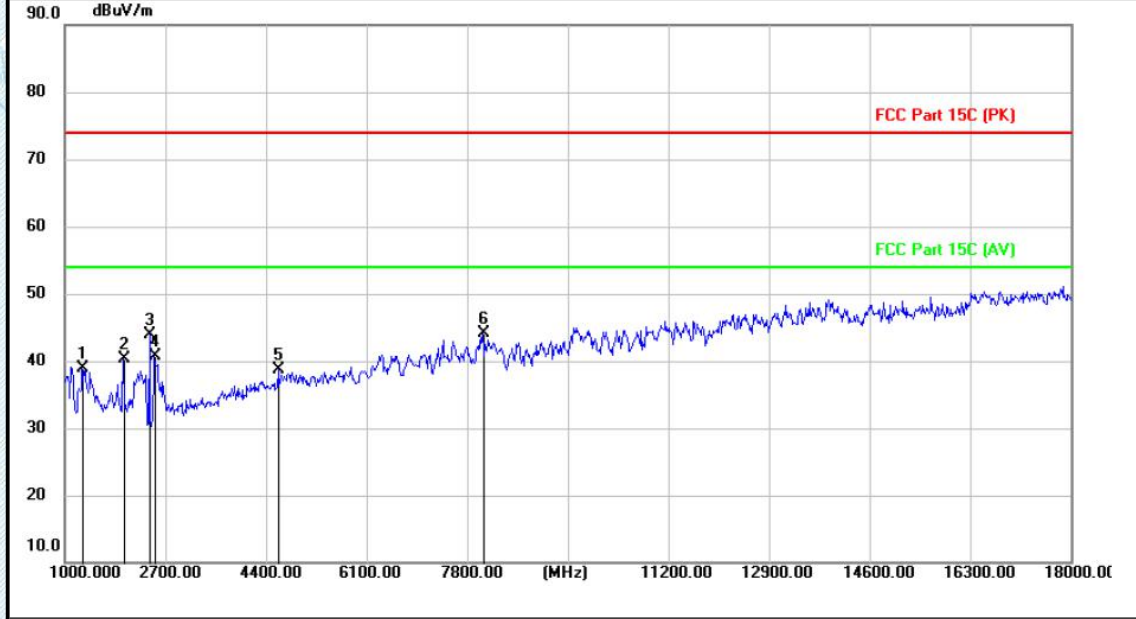
<b>Test Voltage:</b>	DC 7.4V
<b>Ant. Pol.</b>	Vertical
<b>Test Mode:</b>	TX 802.11b Mode 2412MHz
<b>Remark:</b>	No report for the emission which more than 10 dB below the prescribed limit.



No.	Mk.	Freq. MHz	Reading Level (dBuV)	Correct Factor (dB/m)	Measure- ment (dBuV/m)	Limit (dBuV/m)	Over (dB)	Detector
1		1329.800	52.90	-11.95	40.95	74.00	-33.05	peak
2		1674.900	48.99	-11.46	37.53	74.00	-36.47	peak
3	*	1996.200	55.64	-11.06	44.58	74.00	-29.42	peak
4		2411.000	53.29	-10.91	42.38	74.00	-31.62	peak
5		2662.600	53.01	-10.79	42.22	74.00	-31.78	peak
6		3329.000	47.87	-9.99	37.88	74.00	-36.12	peak

Measurement = Reading level + Correct Factor

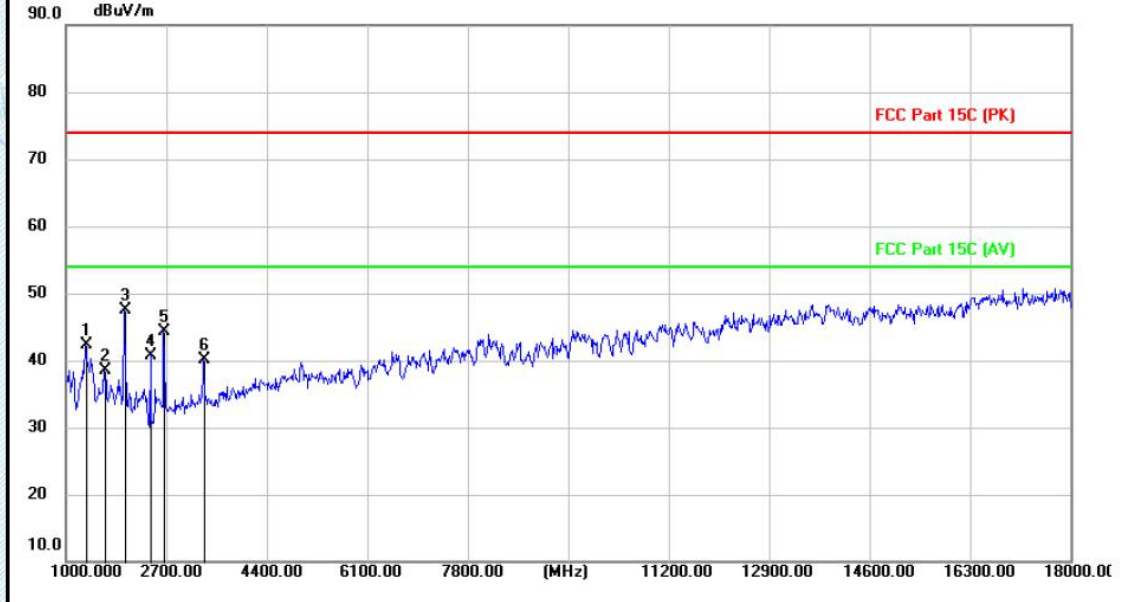
<b>Test Voltage:</b>	DC 7.4V
<b>Ant. Pol.</b>	Horizontal
<b>Test Mode:</b>	TX 802.11b Mode 2437MHz
<b>Remark:</b>	No report for the emission which more than 10 dB below the prescribed limit.



No.	Mk.	Freq. MHz	Reading Level (dBuV)	Correct Factor (dB/m)	Measure- ment (dBuV/m)	Limit (dBuV/m)	Over (dB)	Detector
1		1304.300	50.84	-11.96	38.88	74.00	-35.12	peak
2		1999.600	51.43	-11.06	40.37	74.00	-33.63	peak
3		2436.500	54.80	-10.90	43.90	74.00	-30.10	peak
4		2516.400	51.66	-10.87	40.79	74.00	-33.21	peak
5		4605.700	45.10	-6.46	38.64	74.00	-35.36	peak
6	*	8061.800	42.03	2.06	44.09	74.00	-29.91	peak

Measurement = Reading level + Correct Factor

<b>Test Voltage:</b>	DC 7.4V
<b>Ant. Pol.</b>	Vertical
<b>Test Mode:</b>	TX 802.11b Mode 2437MHz
<b>Remark:</b>	No report for the emission which more than 10 dB below the prescribed limit.

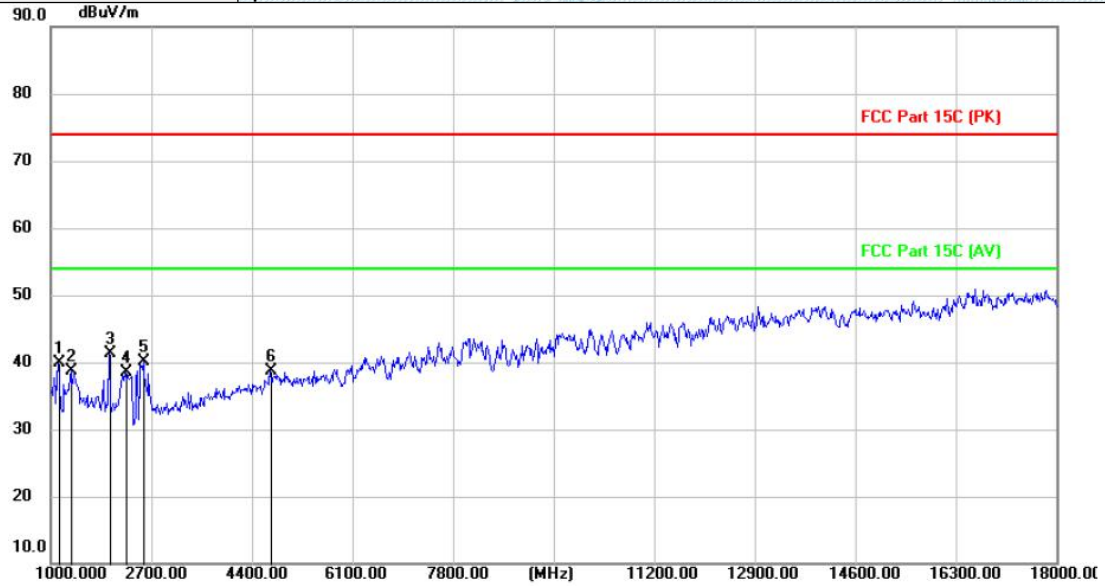


No.	Mk.	Freq. MHz	Reading Level (dBuV)	Correct Factor (dB/m)	Measure- ment (dBuV/m)	Limit (dBuV/m)	Over (dB)	Detector
1		1329.800	54.28	-11.95	42.33	74.00	-31.67	peak
2		1659.600	49.96	-11.49	38.47	74.00	-35.53	peak
3	*	1996.200	58.54	-11.06	47.48	74.00	-26.52	peak
4		2434.800	51.71	-10.91	40.80	74.00	-33.20	peak
5		2657.500	55.11	-10.78	44.33	74.00	-29.67	peak
6		3332.400	50.01	-9.98	40.03	74.00	-33.97	peak

**Measurement = Reading level + Correct Factor**



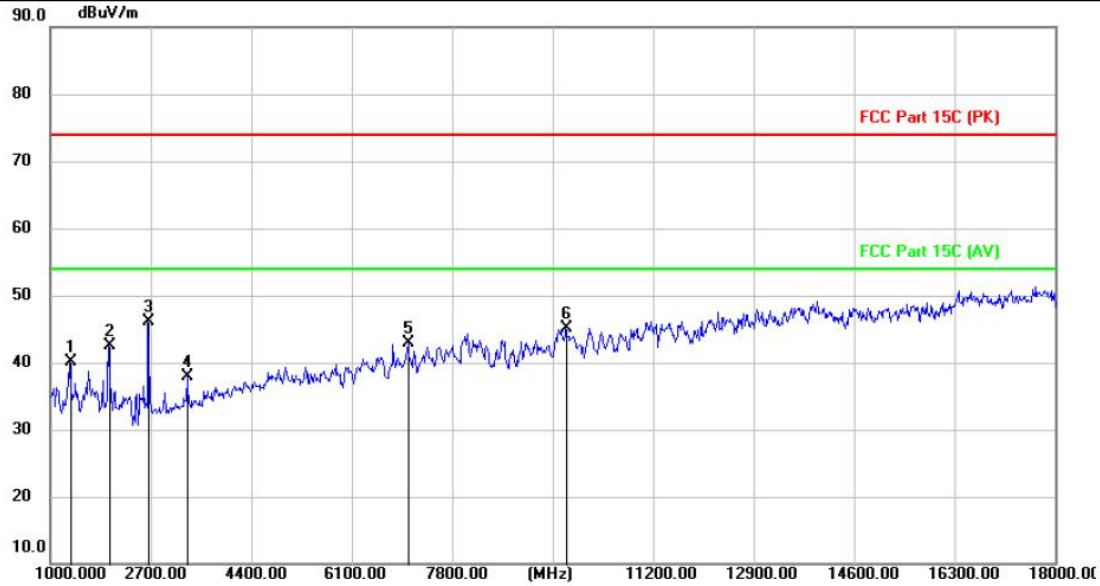
<b>Test Voltage:</b>	DC 7.4V
<b>Ant. Pol.</b>	Horizontal
<b>Test Mode:</b>	TX 802.11b Mode 2462MHz
<b>Remark:</b>	No report for the emission which more than 10 dB below the prescribed limit.



No.	Mk.	Freq. MHz	Reading Level (dBuV)	Correct Factor (dB/m)	Measure- ment (dBuV/m)	Limit (dBuV/m)	Over (dB)	Detector
1		1127.500	52.02	-12.19	39.83	74.00	-34.17	peak
2		1346.800	50.72	-11.94	38.78	74.00	-35.22	peak
3	*	1994.500	52.36	-11.07	41.29	74.00	-32.71	peak
4		2264.800	49.38	-10.96	38.42	74.00	-35.58	peak
5		2570.800	50.87	-10.84	40.03	74.00	-33.97	peak
6		4716.200	44.86	-6.16	38.70	74.00	-35.30	peak

Measurement = Reading level + Correct Factor

<b>Test Voltage:</b>	DC 7.4V
<b>Ant. Pol.</b>	Vertical
<b>Test Mode:</b>	TX 802.11b Mode 2462MHz
<b>Remark:</b>	No report for the emission which more than 10 dB below the prescribed limit.



No.	Mk.	Freq. MHz	Reading Level (dBuV)	Correct Factor (dB/m)	Measure- ment (dBuV/m)	Limit (dBuV/m)	Over (dB)	Detector
1		1331.500	52.09	-11.94	40.15	74.00	-33.85	peak
2		1992.800	53.54	-11.07	42.47	74.00	-31.53	peak
3	*	2660.900	56.87	-10.79	46.08	74.00	-27.92	peak
4		3322.200	48.00	-10.01	37.99	74.00	-36.01	peak
5		7053.700	43.37	-0.54	42.83	74.00	-31.17	peak
6		9736.300	41.65	3.49	45.14	74.00	-28.86	peak

**Measurement = Reading level + Correct Factor**

## 4.EUT TEST PHOTOS

Reference to the document No.: Test Photos.

## 5. PHOTOGRAPHS OF EUT CONSTRUCTIONAL

Reference to the document No.: External Photos and Internal Photos.

\*\*\*\*\*THE END\*\*\*\*\*