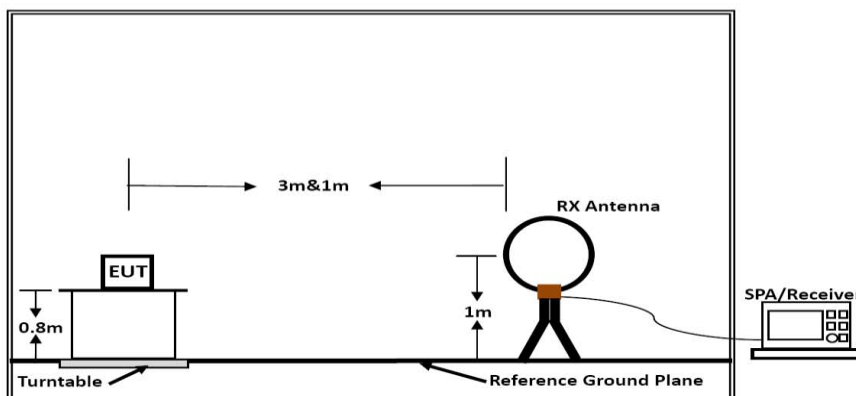
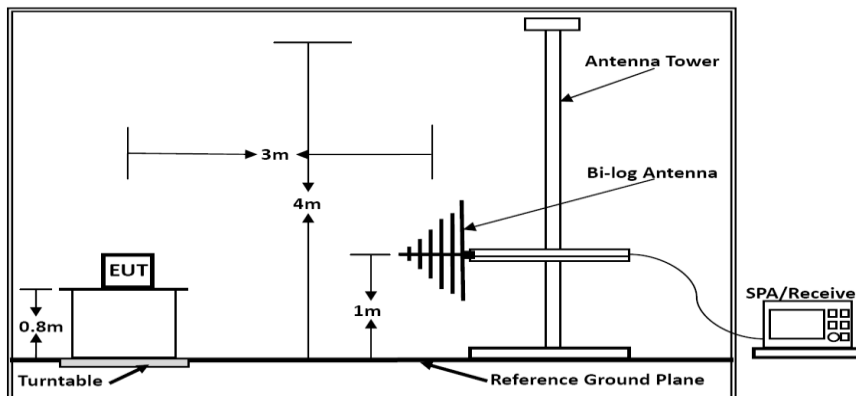


5.4.4. Test Setup Layout

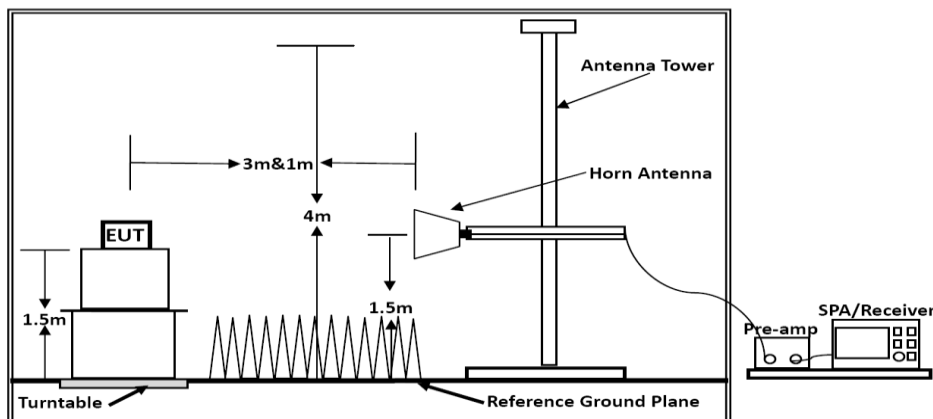
For radiated emissions below 30MHz



Below 30MHz



Below 1GHz



Above 1GHz

Above 10 GHz shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade from 3m to 1.5m.

Distance extrapolation factor = $20 \log (\text{specific distance [3m]} / \text{test distance [1.5m]})$ (dB);

Limit line = specific limits (dBuV) + distance extrapolation factor [6 dB].

5.4.5. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

5.4.6. Results of Radiated Emissions (9kHz~30MHz)

Temperature	25°C	Humidity	60%
Test Engineer	Jacky	Configurations	802.11b/g/n

Freq. (MHz)	Level (dBUV)	Over Limit (dB)	Over Limit (dBUV)	Remark
-	-	-	-	See Note

Note:

The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.

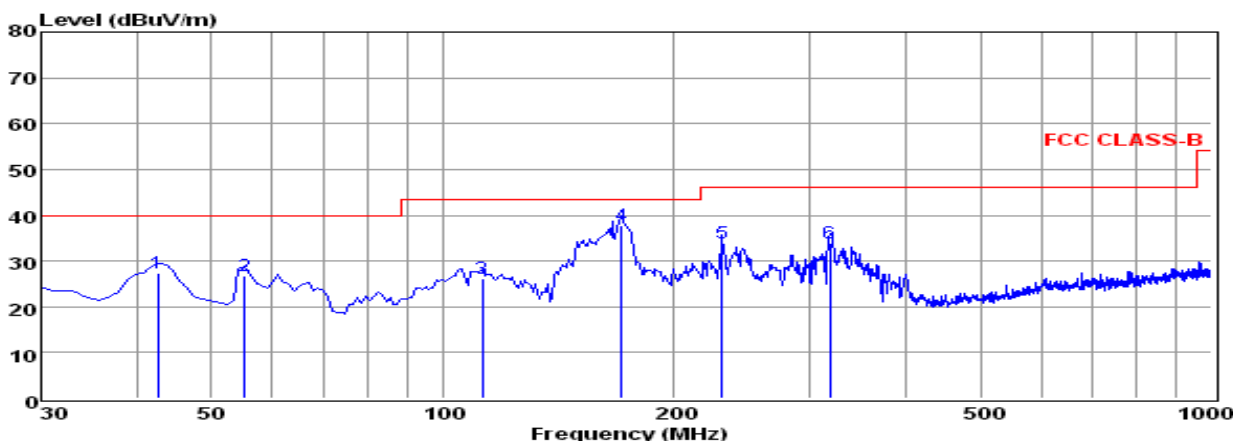
Distance extrapolation factor = 40 log (specific distance / test distance) (dB);

Limit line = specific limits (dBUV) + distance extrapolation factor.

5.4.7. Results of Radiated Emissions (30MHz~1GHz)

Temperature	25°C	Humidity	60%
Test Engineer	Jacky	Configurations	802.11b (High CH)

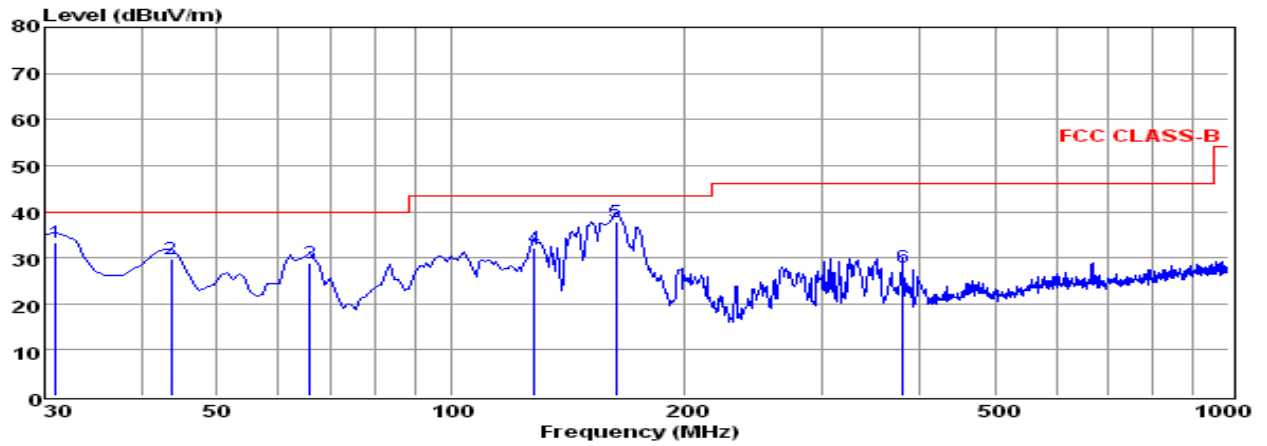
Test result for 802.11b (High Channel)



Env./Ins: 24°C/56%
 pol: HORIZONTAL

	Freq MHz	Reading dBUV	CabLos dB	Antfac dB/m	Measured dBUV/m	Limit dBUV/m	Over dB	Remark
1	42.61	13.32	0.50	13.56	27.38	40.00	-12.62	QP
2	55.22	13.33	0.46	13.01	26.80	40.00	-13.20	QP
3	112.45	13.74	0.65	11.82	26.21	43.50	-17.29	QP
4	170.65	27.94	0.80	9.02	37.76	43.50	-5.74	QP
5	230.79	21.16	0.98	11.68	33.82	46.00	-12.18	QP
6	319.06	19.70	1.01	13.32	34.03	46.00	-11.97	QP

Note: 1. All readings are Quasi-peak values.
 2. Measured= Reading + Antenna Factor + Cable Loss
 3. The emission that are 20db below the official limit are not reported



Env./Ins: 24°C/56%
 pol: VERTICAL

	Freq	Reading	CabLos	Antfac	Measured	Limit	Over	Remark
	MHz	dBuV	dB	dB/m	dBuV/m	dBuV/m	dB	
1	30.97	20.60	0.39	12.32	33.31	40.00	-6.69	QP
2	43.58	15.88	0.41	13.56	29.85	40.00	-10.15	QP
3	65.89	18.04	0.52	10.34	28.90	40.00	-11.10	QP
4	127.97	22.26	0.67	9.24	32.17	43.50	-11.33	QP
5	162.89	28.17	0.86	8.76	37.79	43.50	-5.71	QP
6	381.14	12.23	1.18	14.62	28.03	46.00	-17.97	QP

- Note: 1. All readings are Quasi-peak values.
 2. Measured= Reading + Antenna Factor + Cable Loss
 3. The emission that are 20db below the official limit are not reported

Note:

Pre-scan all mode and recorded the worst case results in this report (802.11b (High Channel)).

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

5.4.8. Results for Radiated Emissions (Above 1GHz)

802.11b

Channel 1

Freq. MHz	Reading dBuv	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuv/m	Limit dBuv/m	Margin dB	Remark	Pol.
4824.00	60.70	33.06	35.04	3.94	62.66	74	-11.34	Peak	Horizontal
4824.00	41.79	33.06	35.04	3.94	43.75	54	-10.25	Average	Horizontal
4824.00	59.25	33.06	35.04	3.94	61.21	74	-12.79	Peak	Vertical
4824.00	40.31	33.06	35.04	3.94	42.27	54	-11.73	Average	Vertical

Channel 6

Freq. MHz	Reading dBuv	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuv/m	Limit dBuv/m	Margin dB	Remark	Pol.
4874.00	60.90	33.16	35.15	3.96	62.87	74	-11.13	Peak	Horizontal
4874.00	41.05	33.16	35.15	3.96	43.02	54	-10.98	Average	Horizontal
4874.00	59.44	33.16	35.15	3.96	61.41	74	-12.59	Peak	Vertical
4874.00	39.81	33.16	35.15	3.96	41.78	54	-12.22	Average	Vertical

Channel 11

Freq. MHz	Reading dBuv	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuv/m	Limit dBuv/m	Margin dB	Remark	Pol.
4924.00	60.34	33.26	35.14	3.98	62.44	74	-11.56	Peak	Horizontal
4924.00	40.91	33.26	35.14	3.98	43.01	54	-10.99	Average	Horizontal
4924.00	58.95	33.26	35.14	3.98	61.05	74	-12.95	Peak	Vertical
4924.00	39.68	33.26	35.14	3.98	41.78	54	-12.22	Average	Vertical

802.11g

Channel 1

Freq. MHz	Reading dBuv	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuv/m	Limit dBuv/m	Margin dB	Remark	Pol.
4824.00	58.37	33.06	35.04	3.94	60.33	74	-13.67	Peak	Horizontal
4824.00	39.49	33.06	35.04	3.94	41.45	54	-12.55	Average	Horizontal
4824.00	58.05	33.06	35.04	3.94	60.01	74	-13.99	Peak	Vertical
4824.00	38.79	33.06	35.04	3.94	40.75	54	-13.25	Average	Vertical

Channel 6

Freq. MHz	Reading dBuv	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuv/m	Limit dBuv/m	Margin dB	Remark	Pol.
4874.00	58.05	33.16	35.15	3.96	60.02	74	-13.98	Peak	Horizontal
4874.00	39.90	33.16	35.15	3.96	41.87	54	-12.13	Average	Horizontal
4874.00	57.28	33.16	35.15	3.96	59.25	74	-14.75	Peak	Vertical
4874.00	38.66	33.16	35.15	3.96	40.63	54	-13.37	Average	Vertical

Channel 11

Freq. MHz	Reading dBuv	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuv/m	Limit dBuv/m	Margin dB	Remark	Pol.
4924.00	58.29	33.26	35.14	3.98	60.39	74	-13.61	Peak	Horizontal
4924.00	39.67	33.26	35.14	3.98	41.77	54	-12.23	Average	Horizontal
4924.00	57.04	33.26	35.14	3.98	59.14	74	-14.86	Peak	Vertical
4924.00	38.23	33.26	35.14	3.98	40.33	54	-13.67	Average	Vertical

802.11n HT20

Channel 1

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4824.00	60.82	33.06	35.04	3.94	62.78	74	-11.22	Peak	Horizontal
4824.00	39.45	33.06	35.04	3.94	41.41	54	-12.59	Average	Horizontal
4824.00	58.06	33.06	35.04	3.94	60.02	74	-13.98	Peak	Vertical
4824.00	39.40	33.06	35.04	3.94	41.36	54	-12.64	Average	Vertical

Channel 6

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4874.00	60.92	33.16	35.15	3.96	62.89	74	-11.11	Peak	Horizontal
4874.00	39.39	33.16	35.15	3.96	41.36	54	-12.64	Average	Horizontal
4874.00	58.23	33.16	35.15	3.96	60.20	74	-13.8	Peak	Vertical
4874.00	39.33	33.16	35.15	3.96	41.30	54	-12.7	Average	Vertical

Channel 11

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4924.00	60.03	33.26	35.14	3.98	62.13	74	-11.87	Peak	Horizontal
4924.00	39.77	33.26	35.14	3.98	41.87	54	-12.13	Average	Horizontal
4924.00	59.31	33.26	35.14	3.98	61.41	74	-12.59	Peak	Vertical
4924.00	39.25	33.26	35.14	3.98	41.35	54	-12.65	Average	Vertical

802.11n HT40

Channel 3

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4844.00	56.39	33.06	35.04	3.94	58.35	74	-15.65	Peak	Horizontal
4844.00	38.23	33.06	35.04	3.94	40.19	54	-13.81	Average	Horizontal
4844.00	56.26	33.06	35.04	3.94	58.22	74	-15.78	Peak	Vertical
4844.00	38.31	33.06	35.04	3.94	40.27	54	-13.73	Average	Vertical

Channel 6

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4874.00	56.05	33.16	35.15	3.96	58.02	74	-15.98	Peak	Horizontal
4874.00	38.82	33.16	35.15	3.96	40.79	54	-13.21	Average	Horizontal
4874.00	56.59	33.16	35.15	3.96	58.56	74	-15.44	Peak	Vertical
4874.00	37.3	33.16	35.15	3.96	39.27	54	-14.73	Average	Vertical

Channel 9

Freq. MHz	Reading dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
4904.00	56.88	33.26	35.14	3.98	58.98	74	-15.02	Peak	Horizontal
4904.00	38.26	33.26	35.14	3.98	40.36	54	-13.64	Average	Horizontal
4904.00	56.04	33.26	35.14	3.98	58.14	74	-15.86	Peak	Vertical
4904.00	38.68	33.26	35.14	3.98	40.78	54	-13.22	Average	Vertical

Notes:

1. Measuring frequencies from 9k~10th harmonic or 26.5GHz (which is less), No emission found between lowest internal used/generated frequency to 30MHz.
2. Radiated emissions measured in frequency range from 9k~10th harmonic or 40GHz (which is less) were made with an instrument using Peak detector mode.
3. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

5.4.9. Results of Band Edges Test (Radiated)

802.11b

Tx-2412

Freq. MHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
2390.00	52.90	32.89	35.16	3.51	54.14	74	-19.86	Peak	Horizontal
2390.00	36.34	32.89	35.16	3.51	37.58	54	-16.42	Average	Horizontal
2400.00	54.48	32.92	35.16	3.54	55.78	74	-18.22	Peak	Horizontal
2400.00	36.06	32.92	35.16	3.54	37.36	54	-16.64	Average	Horizontal
2390.00	51.76	32.89	35.16	3.51	53.00	74	-21.00	Peak	Vertical
2390.00	35.90	32.89	35.16	3.51	37.14	54	-16.86	Average	Vertical
2400.00	54.48	32.92	35.16	3.54	55.78	74	-18.22	Peak	Vertical
2400.00	35.95	32.92	35.16	3.54	37.25	54	-16.75	Average	Vertical

Tx-2462

Freq. MHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
2483.50	54.87	33.06	35.18	3.60	56.35	74	-17.65	Peak	Horizontal
2483.50	36.74	33.06	35.18	3.60	38.22	54	-15.78	Average	Horizontal
2483.50	55.28	33.06	35.18	3.60	56.76	74	-17.24	Peak	Vertical
2483.50	36.92	33.06	35.18	3.60	38.40	54	-15.60	Average	Vertical

802.11g

Tx-2412

Freq. MHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
2390.00	53.48	32.89	35.16	3.51	54.72	74	-19.28	Peak	Horizontal
2390.00	35.45	32.89	35.16	3.51	36.69	54	-17.31	Average	Horizontal
2400.00	53.72	32.92	35.16	3.54	55.02	74	-18.98	Peak	Horizontal
2400.00	36.25	32.92	35.16	3.54	37.55	54	-16.45	Average	Horizontal
2390.00	53.13	32.89	35.16	3.51	54.37	74	-19.63	Peak	Vertical
2390.00	34.78	32.89	35.16	3.51	36.02	54	-17.98	Average	Vertical
2400.00	54.11	32.92	35.16	3.54	55.41	74	-18.59	Peak	Vertical
2400.00	36.48	32.92	35.16	3.54	37.78	54	-16.22	Average	Vertical

Tx-2462

Freq. MHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
2483.50	55.18	33.06	35.18	3.60	56.66	74	-17.34	Peak	Horizontal
2483.50	36.54	33.06	35.18	3.60	38.02	54	-15.98	Average	Horizontal
2483.50	55.30	33.06	35.18	3.60	56.78	74	-17.22	Peak	Vertical
2483.50	36.67	33.06	35.18	3.60	38.15	54	-15.85	Average	Vertical

802.11n(HT20)

Tx-2412

Freq. MHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
2390.00	51.87	32.89	35.16	3.51	53.11	74	-20.89	Peak	Horizontal
2390.00	35.68	32.89	35.16	3.51	36.92	54	-17.08	Average	Horizontal
2400.00	54.58	32.92	35.16	3.54	55.88	74	-18.12	Peak	Horizontal
2400.00	35.97	32.92	35.16	3.54	37.27	54	-16.73	Average	Horizontal
2390.00	52.77	32.89	35.16	3.51	54.01	74	-19.99	Peak	Vertical
2390.00	35.30	32.89	35.16	3.51	36.54	54	-17.46	Average	Vertical
2400.00	53.48	32.92	35.16	3.54	54.78	74	-19.22	Peak	Vertical
2400.00	36.33	32.92	35.16	3.54	37.63	54	-16.37	Average	Vertical

Tx-2462

Freq. MHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
2483.50	54.93	33.06	35.18	3.60	56.41	74	-17.59	Peak	Horizontal
2483.50	36.80	33.06	35.18	3.60	38.28	54	-15.72	Average	Horizontal
2483.50	54.17	33.06	35.18	3.60	55.65	74	-18.35	Peak	Vertical
2483.50	36.56	33.06	35.18	3.60	38.04	54	-15.96	Average	Vertical

802.11n(HT40)

Tx-2422

Freq. MHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
2390.00	53.02	32.89	35.16	3.51	54.26	74	-19.74	Peak	Horizontal
2390.00	34.77	32.89	35.16	3.51	36.01	54	-17.99	Average	Horizontal
2400.00	53.48	32.92	35.16	3.54	54.78	74	-19.22	Peak	Horizontal
2400.00	35.35	32.92	35.16	3.54	36.65	54	-17.35	Average	Horizontal
2390.00	52.99	32.89	35.16	3.51	54.23	74	-19.77	Peak	Vertical
2390.00	35.18	32.89	35.16	3.51	36.42	54	-17.58	Average	Vertical
2400.00	53.77	32.92	35.16	3.54	55.07	74	-18.93	Peak	Vertical
2400.00	35.00	32.92	35.16	3.54	36.30	54	-17.7	Average	Vertical

Tx-2452

Freq. MHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
2483.50	54.88	33.06	35.18	3.60	56.36	74	-17.64	Peak	Horizontal
2483.50	36.53	33.06	35.18	3.60	38.01	54	-15.99	Average	Horizontal
2483.50	53.74	33.06	35.18	3.60	55.22	74	-18.78	Peak	Vertical
2483.50	37.09	33.06	35.18	3.60	38.57	54	-15.43	Average	Vertical

5.5. Conducted Spurious Emissions and Band Edges Test

5.5.1. Standard Applicable

According to §15.247 (d): In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

5.5.2. Measuring Instruments and Setting

Please refer to section 6 of equipments list in this report. The following table is the setting of the spectrum analyzer.

Spectrum Parameter	Setting
Detector	Peak
Attenuation	Auto
RB / VB (Emission in restricted band)	100KHz/300KHz
RB / VB (Emission in non-restricted band)	100KHz/300KHz

5.5.3. Test Procedures

The transmitter output is connected to a spectrum analyzer. The resolution bandwidth is set to 100 kHz. The video bandwidth is set to 300 kHz

The spectrum from 9kHz to 27GHz is investigated with the transmitter set to the lowest, middle, and highest channels.

5.5.4. Test Setup Layout

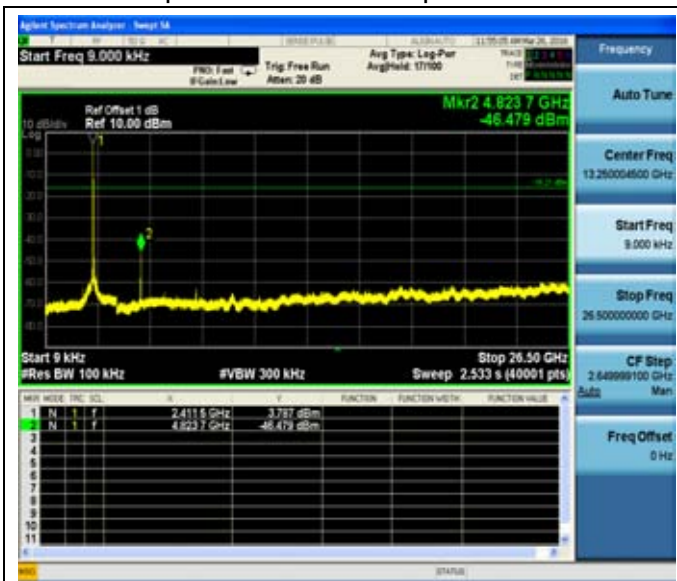
This test setup layout is the same as that shown in section 5.4.4.

5.5.5. EUT Operation during Test

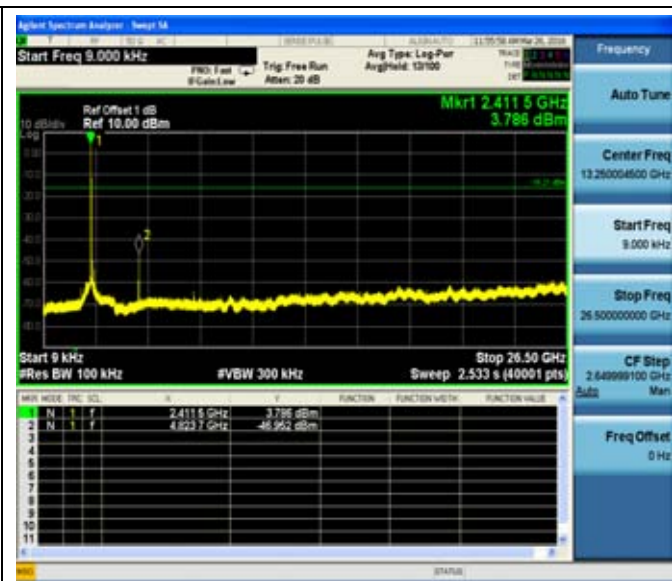
The EUT was programmed to be in continuously transmitting mode.

5.5.6. Test Results of Conducted Spurious Emissions

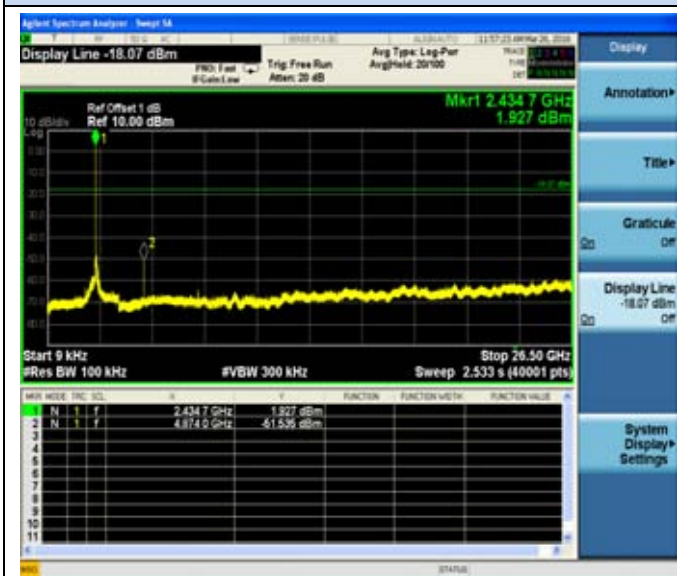
Test plot of Conducted Spurious Emission:



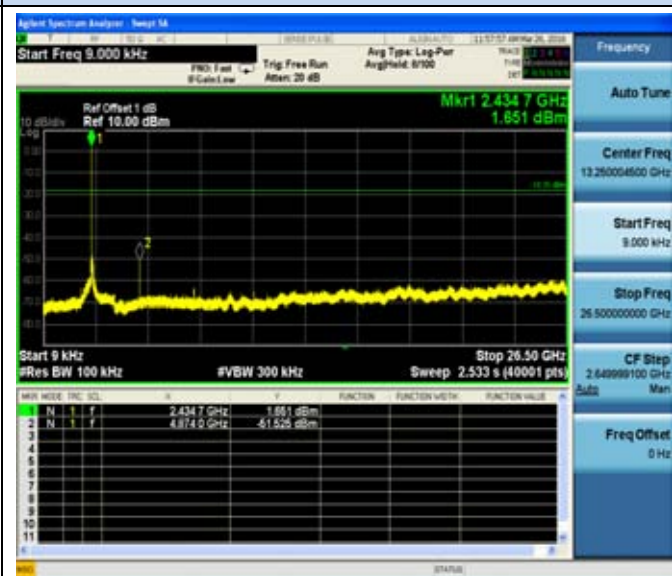
802.11b Chain 0-Low channel



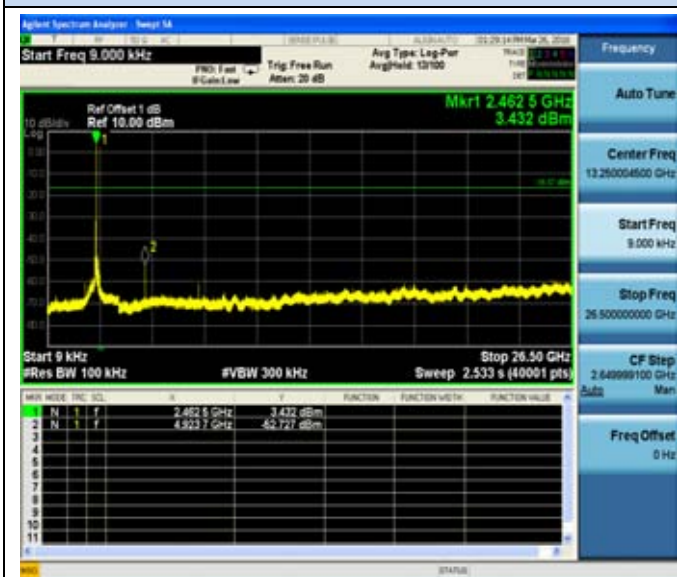
802.11b Chain 1-Low channel



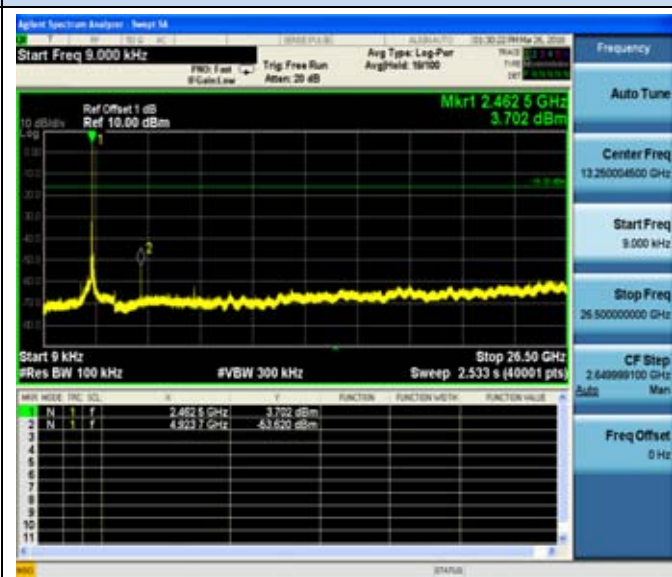
802.11b Chain 0-Middle channel



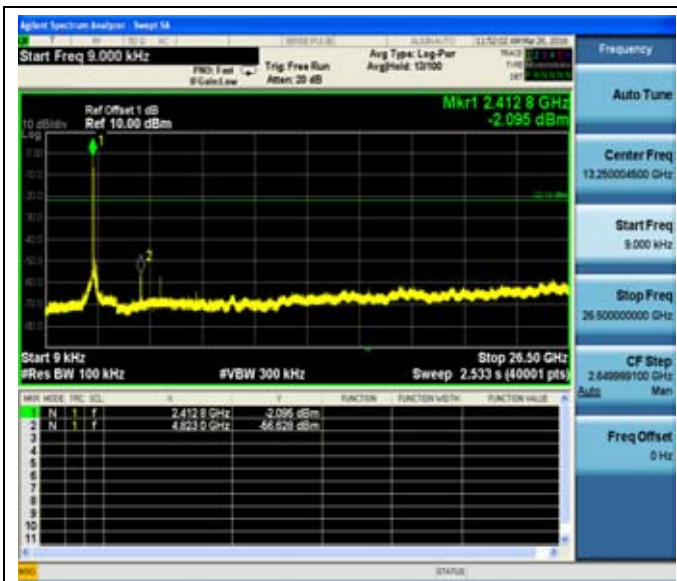
802.11b Chain 1-Middle channel



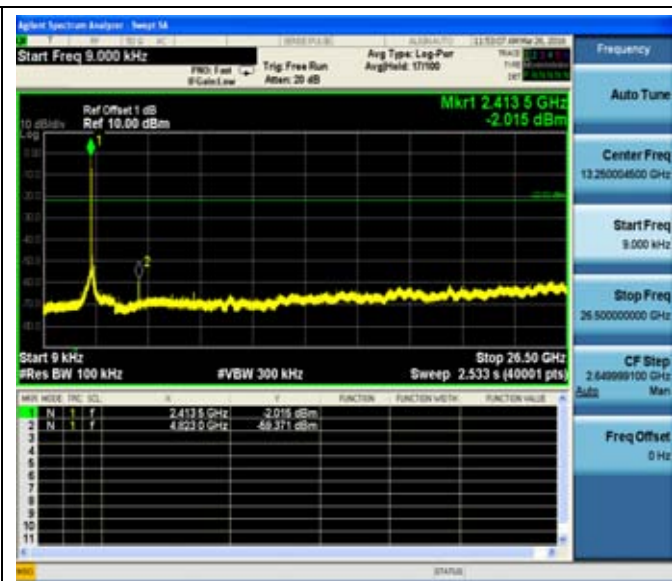
802.11b Chain 0-High channel



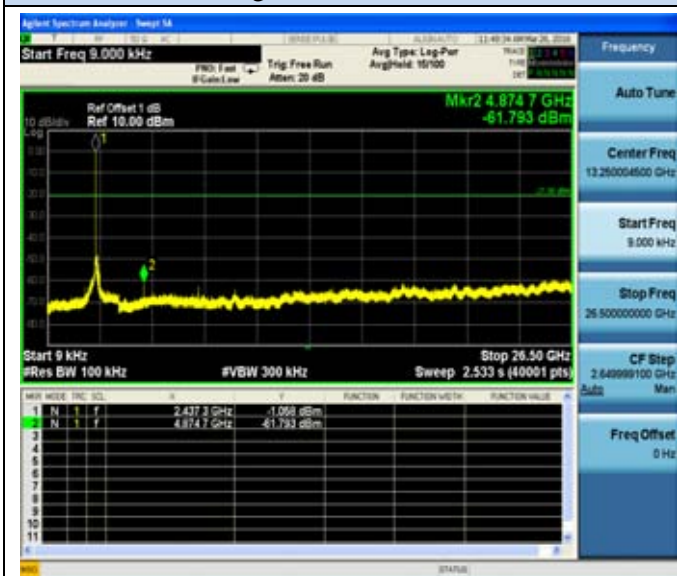
802.11b Chain 1-High channel



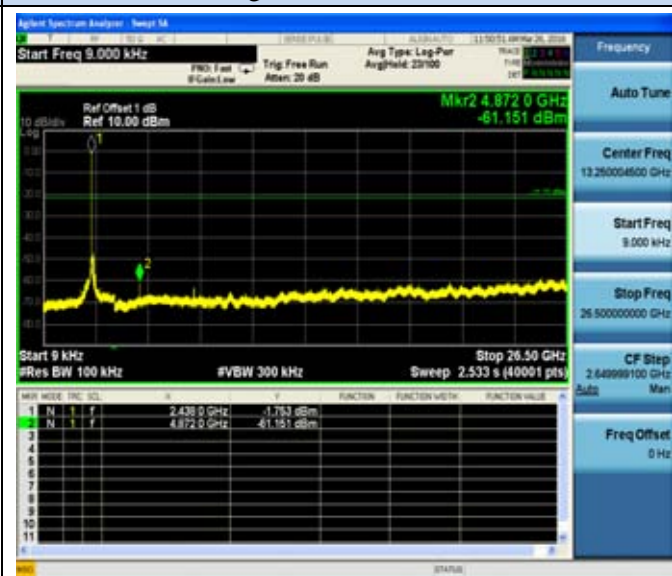
802.11g Chain 0-Low channel



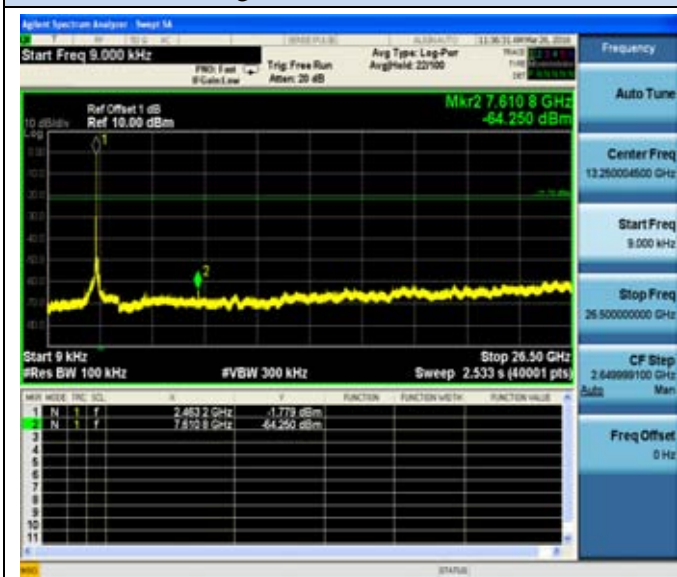
802.11g Chain 1-Low channel



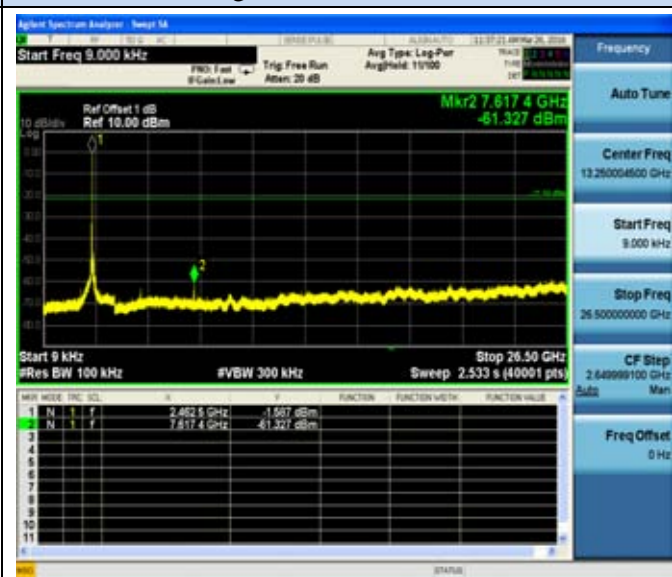
802.11g Chain 0-Middle channel



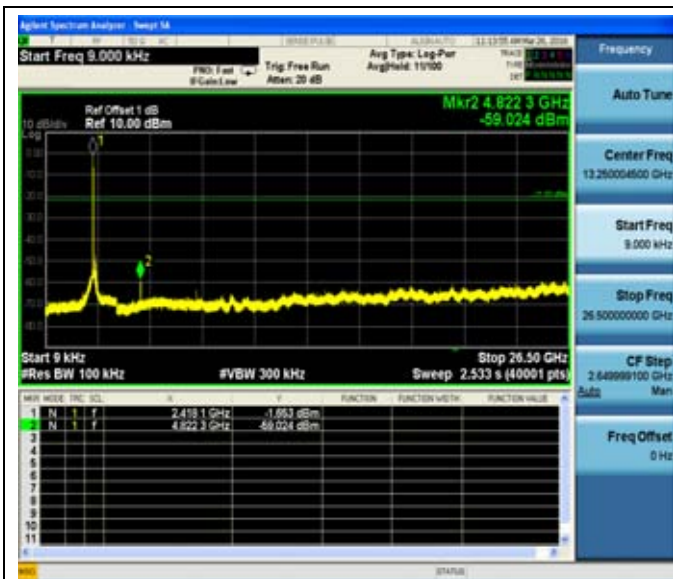
802.11g Chain 1-Middle channel



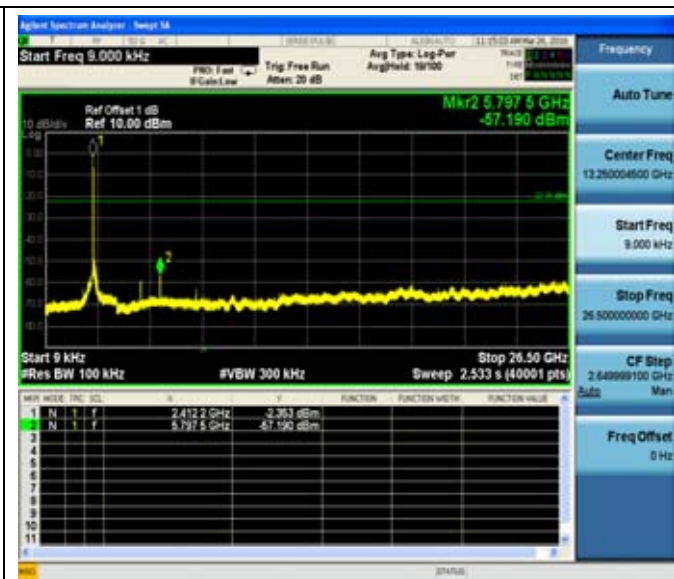
802.11g Chain 0-High channel



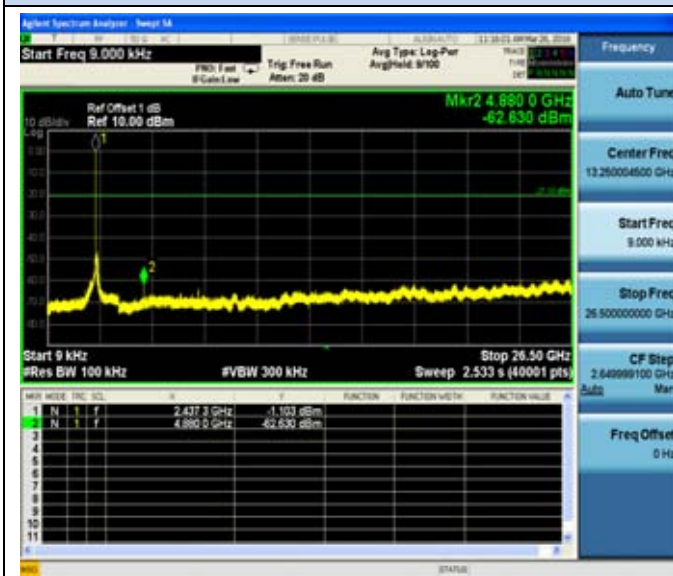
802.11g Chain 1-High channel



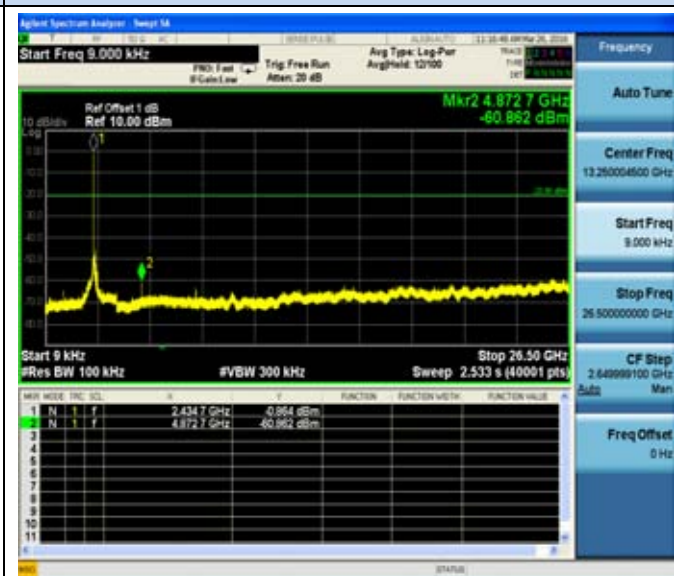
802.11n-HT20 Chain 0-Low channel



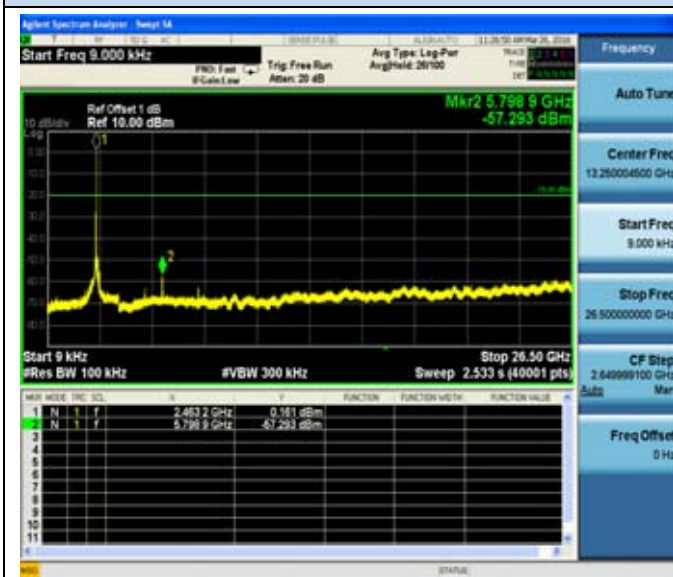
802.11n-HT20 Chain 1-Low channel



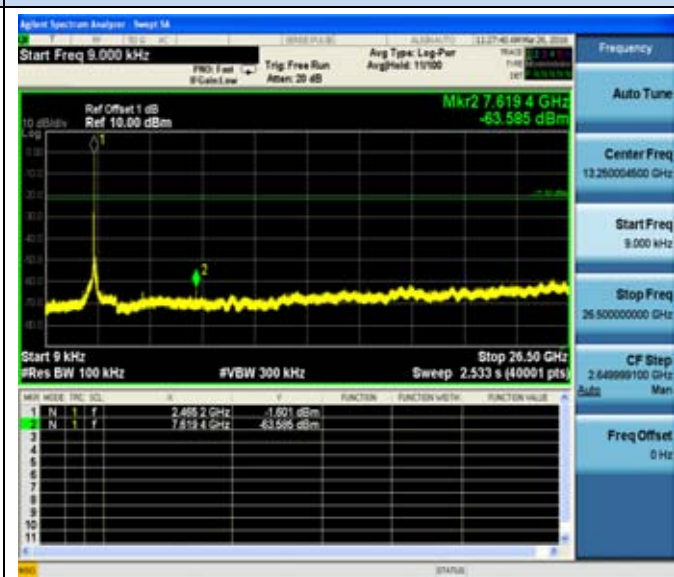
802.11n-HT20 Chain 0-Middle channel



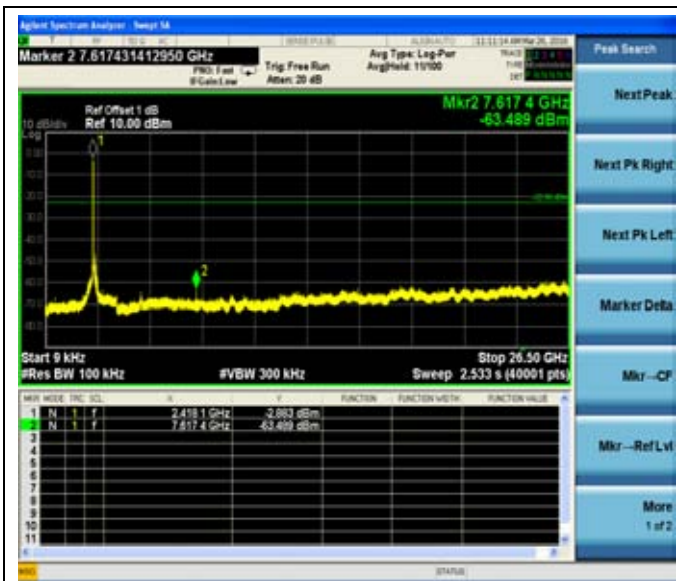
802.11n-HT20 Chain 1-Middle channel



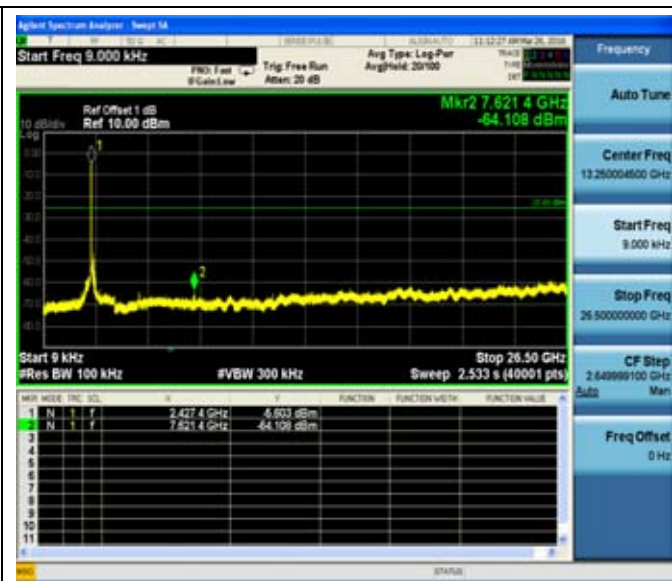
802.11n-HT20 Chain 0-High channel



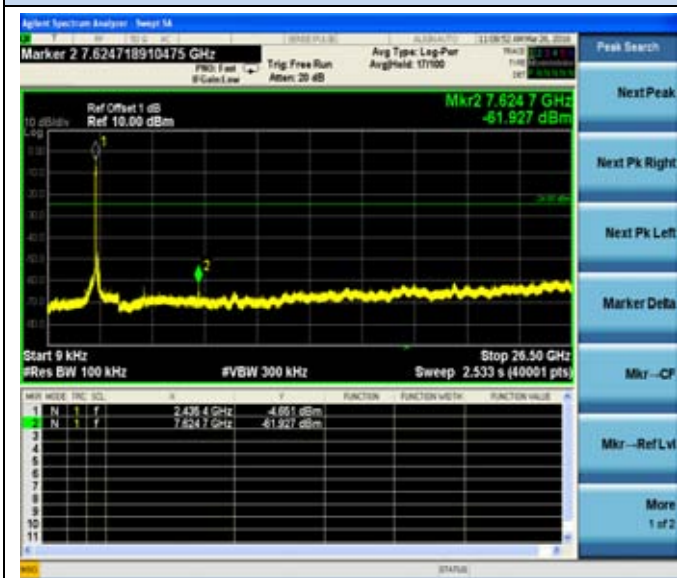
802.11n-HT20 Chain 1-High channel



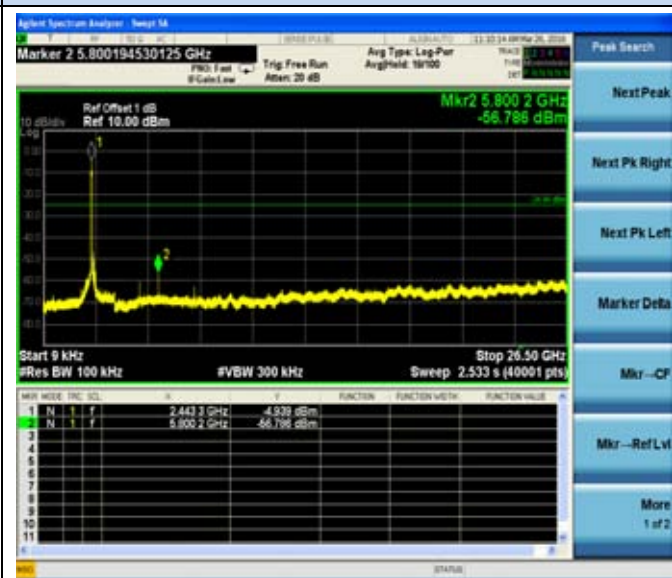
802.11n-HT40 Chain 0-Low channel



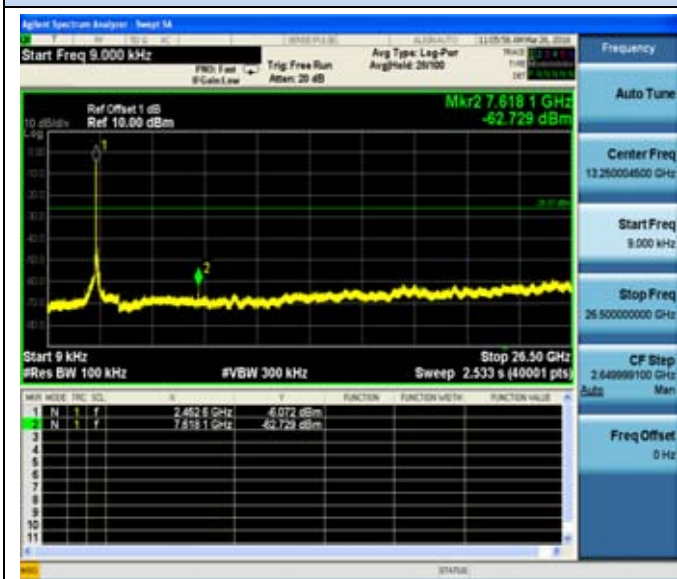
802.11n-HT40 Chain 1-Low channel



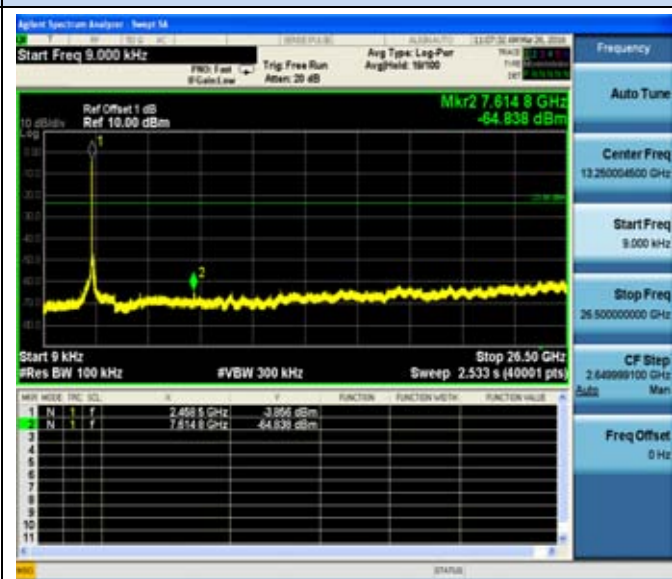
802.11n-HT40 Chain 0-Middle channel



802.11n-HT40 Chain 1-Middle channel



802.11n-HT40 Chain 0-High channel



802.11n-HT40 Chain 1-High channel

5.5.7. Test Results of Band Edges Test



802.11b Chain 0-Low channel



802.11b Chain 1-Low channel



802.11b Chain 0-High channel



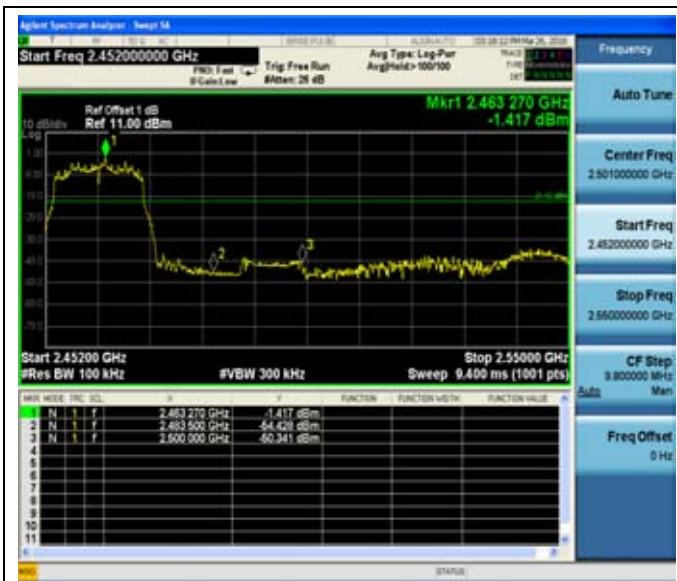
802.11b Chain 1-High channel



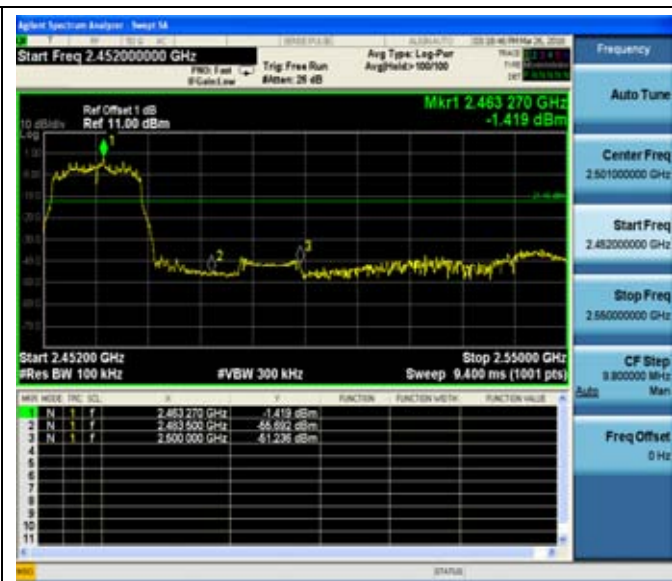
802.11g Chain 0-Low channel



802.11g Chain 1-Low channel



802.11g Chain 0-High channel



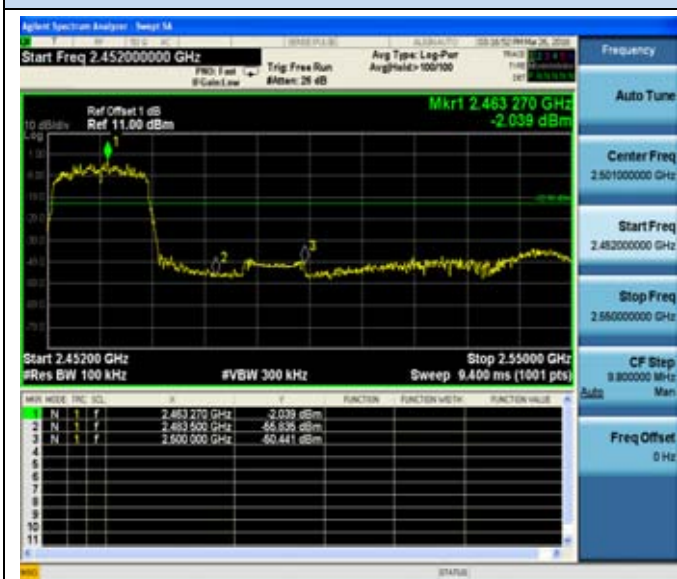
802.11g Chain 1-High channel



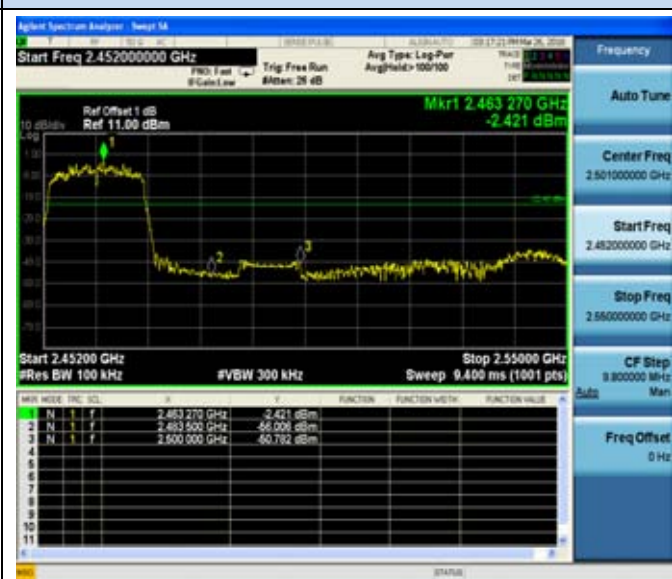
802.11n-HT20 Chain 0-Low channel



802.11n-HT20 Chain 1-Low channel



802.11n-HT20 Chain 0-Middle channel



802.11n-HT20 Chain 1-Middle channel



802.11n-HT40 Chain 0-Low channel



802.11n-HT40 Chain 1-Low channel



802.11n-HT40 Chain 0-High channel



802.11n-HT40 Chain 1-High channel

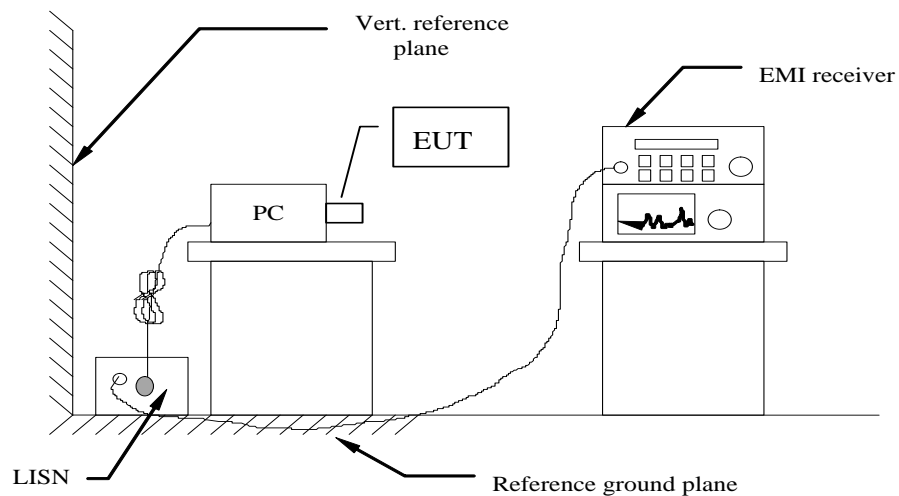
5.6. Power line conducted emissions

5.6.1 Standard Applicable

According to §15.207 (a): For an intentional radiator which is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed 250 microvolts (The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz). The limits at specific frequency range is listed as follows:

Frequency Range (MHz)	Limits (dB μ V)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56	56 to 46
0.50 to 5	56	46
5 to 30	60	50

5.6.2 Block Diagram of Test Setup

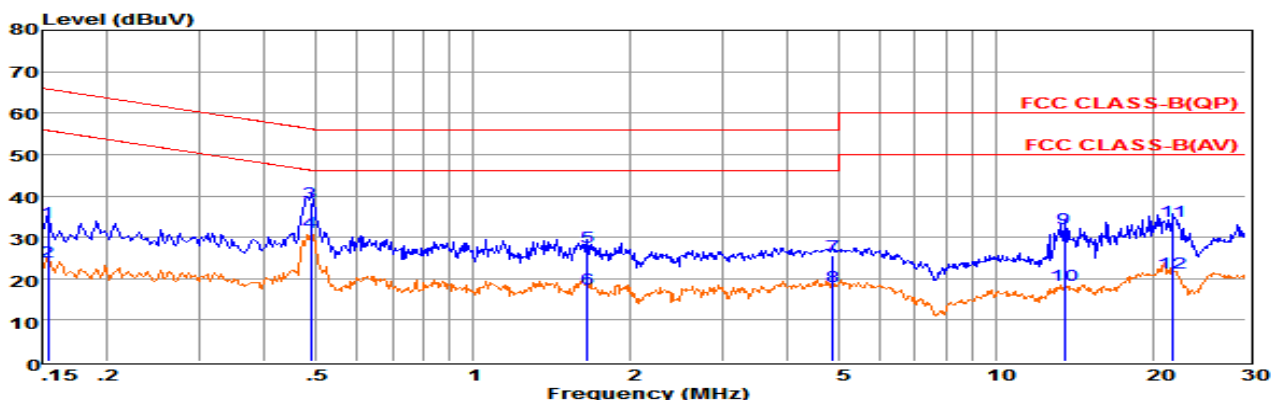


5.6.3 Test Results

PASS.

The test data please refer to following page.

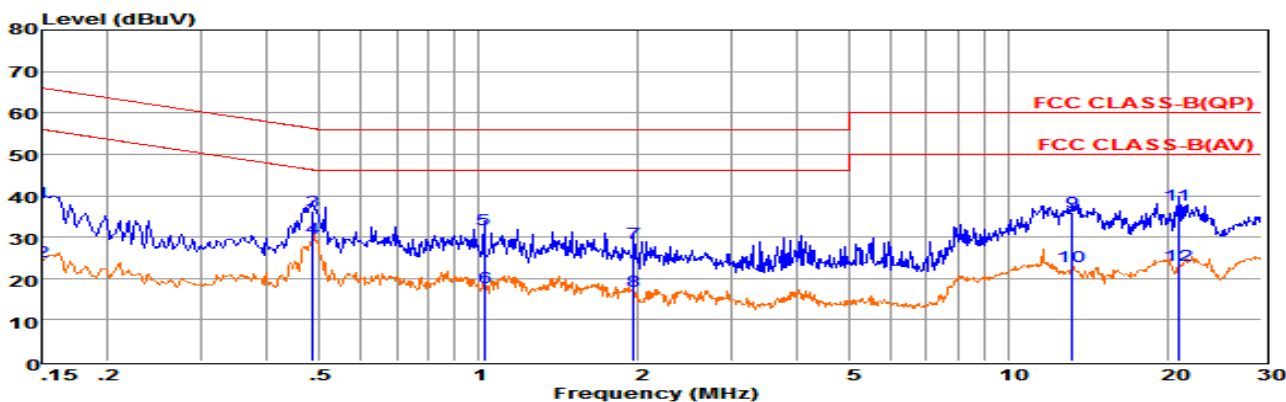
Test result for 802.11b(AC 120V)



Env. Ins: 24*/56%
 Pol: LINE

Freq MHz	Reading dBUV	LisnFac dB	CabLos dB	Atten_Fac dB	Measured dBUV	Limit dBUV	Over dB	Remark
1 0.15403	13.92	9.58	0.02	10.00	33.52	65.78	-32.26	QP
2 0.15413	4.59	9.58	0.02	10.00	24.19	55.77	-31.58	Average
3 0.48890	18.69	9.62	0.04	10.00	38.35	56.19	-17.84	QP
4 0.48900	11.59	9.62	0.04	10.00	31.25	46.18	-14.93	Average
5 1.65370	7.87	9.64	0.05	10.00	27.56	56.00	-28.44	QP
6 1.65470	-2.02	9.64	0.05	10.00	17.67	46.00	-28.33	Average
7 4.87380	5.95	9.65	0.06	10.00	25.66	56.00	-30.34	QP
8 4.87480	-1.42	9.65	0.06	10.00	18.29	46.00	-27.71	Average
913.47925	12.46	9.71	0.10	10.00	32.27	60.00	-27.73	QP
1013.48025	-1.41	9.71	0.10	10.00	18.40	50.00	-31.60	Average
1121.83029	13.99	9.71	0.12	10.00	33.82	60.00	-26.18	QP
1221.83129	1.64	9.71	0.12	10.00	21.47	50.00	-28.53	Average

Remarks: 1. Measured = Reading + Lisn Factor +Cable Loss+Atten_Fac.
 2. The emission levels that are 20dB below the official limit are not reported.

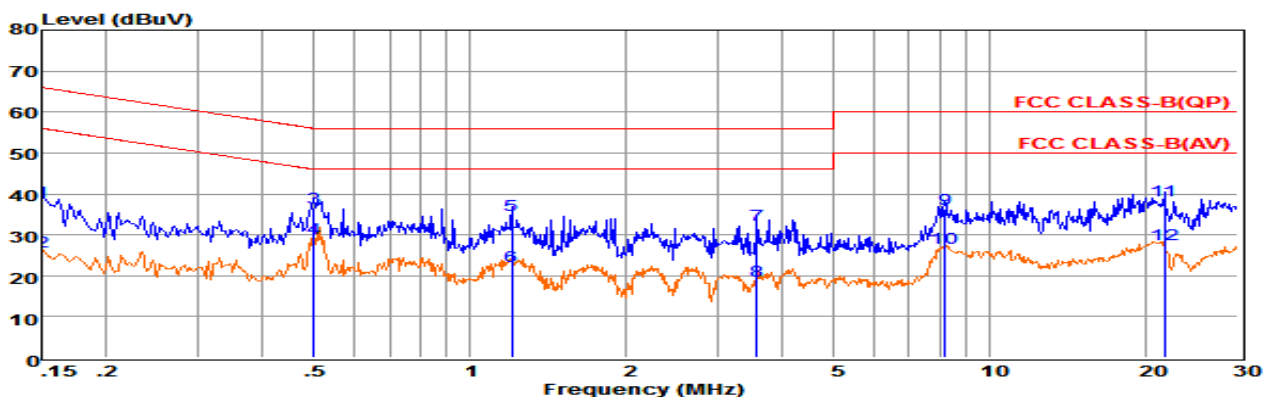


Env. Ins: 24*/56%
 Pol: NEUTRAL

Freq MHz	Reading dBUV	LisnFac dB	CabLos dB	Atten_Fac dB	Measured dBUV	Limit dBUV	Over dB	Remark
1 0.15000	18.55	9.70	0.02	10.00	38.27	66.00	-27.73	QP
2 0.15010	4.40	9.70	0.02	10.00	24.12	55.99	-31.87	Average
3 0.48632	16.60	9.62	0.04	10.00	36.26	56.23	-19.97	QP
4 0.48642	10.16	9.62	0.04	10.00	29.82	46.23	-16.41	Average
5 1.02652	12.27	9.63	0.05	10.00	31.95	56.00	-24.05	QP
6 1.02752	-1.93	9.63	0.05	10.00	17.75	46.00	-28.25	Average
7 1.95925	8.94	9.63	0.05	10.00	28.62	56.00	-27.38	QP
8 1.96025	-2.79	9.63	0.05	10.00	16.89	46.00	-29.11	Average
913.19659	16.25	9.73	0.10	10.00	36.08	60.00	-23.92	QP
1013.19759	2.96	9.73	0.10	10.00	22.79	50.00	-27.21	Average
1120.92431	17.73	9.85	0.12	10.00	37.70	60.00	-22.30	QP
1220.92531	3.21	9.85	0.12	10.00	23.18	50.00	-26.82	Average

Remarks: 1. Measured = Reading + Lisn Factor +Cable Loss+Atten_Fac.
 2. The emission levels that are 20dB below the official limit are not reported.

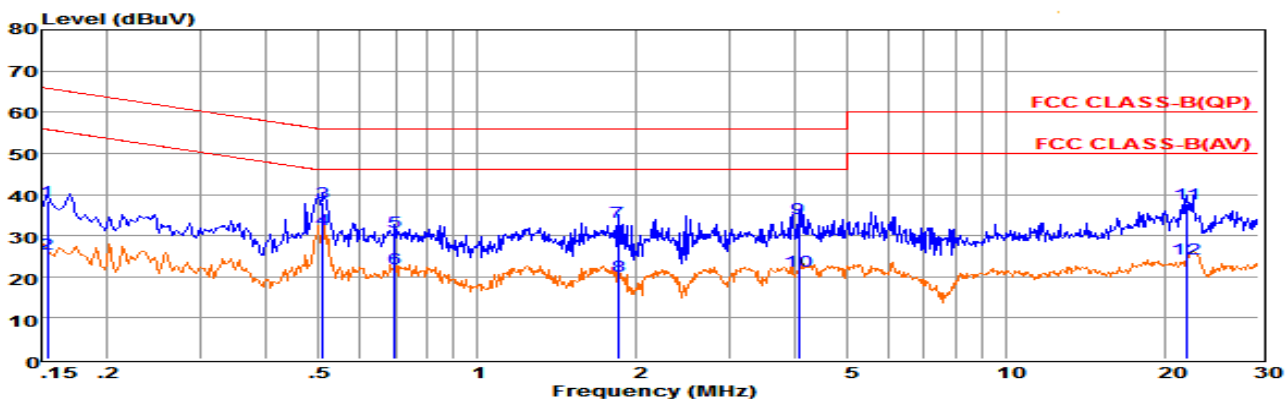
Test result for 802.11b(AC 240V)



Env. Ins: 24*/56%
 Pol: NEUTRAL

Freq MHz	Reading dBuV	LisnFac dB	CabLos dB	Atten_Fac dB	Measured dBuV	Limit dBuV	Over dB	Remark
1 0.15000	18.20	9.70	0.02	10.00	37.92	66.00	-28.08	QP
2 0.15010	6.12	9.70	0.02	10.00	25.84	55.99	-30.15	Average
3 0.50203	17.04	9.62	0.04	10.00	36.70	56.00	-19.30	QP
4 0.50213	9.50	9.62	0.04	10.00	29.16	46.00	-16.84	Average
5 1.20336	15.13	9.63	0.05	10.00	34.81	56.00	-21.19	QP
6 1.20436	2.75	9.63	0.05	10.00	22.43	46.00	-23.57	Average
7 3.56539	12.85	9.65	0.06	10.00	32.56	56.00	-23.44	QP
8 3.56639	-0.90	9.65	0.06	10.00	18.81	46.00	-27.19	Average
9 8.19160	16.45	9.70	0.07	10.00	36.22	60.00	-23.78	QP
10 8.19260	6.89	9.70	0.07	10.00	26.66	50.00	-23.34	Average
1121.71493	18.47	9.82	0.12	10.00	38.41	60.00	-21.59	QP
1221.71593	7.76	9.82	0.12	10.00	27.70	50.00	-22.30	Average

Remarks: 1. Measured = Reading + Lisn Factor +Cable Loss+Atten_Fac.
 2. The emission levels that are 20dB below the official limit are not reported.



Env. Ins: 24*/56%
 Pol: LINE

Freq MHz	Reading dBuV	LisnFac dB	CabLos dB	Atten_Fac dB	Measured dBuV	Limit dBuV	Over dB	Remark
1 0.15403	18.70	9.58	0.02	10.00	38.30	65.78	-27.48	QP
2 0.15413	6.09	9.58	0.02	10.00	25.69	55.77	-30.08	Average
3 0.51007	18.46	9.62	0.04	10.00	38.12	56.00	-17.88	QP
4 0.51017	11.91	9.62	0.04	10.00	31.57	46.00	-14.43	Average
5 0.69725	11.17	9.64	0.04	10.00	30.85	56.00	-25.15	QP
6 0.69735	2.45	9.64	0.04	10.00	22.13	46.00	-23.87	Average
7 1.84833	13.53	9.64	0.05	10.00	33.22	56.00	-22.78	QP
8 1.84933	0.47	9.64	0.05	10.00	20.16	46.00	-25.84	Average
9 4.04885	14.58	9.65	0.06	10.00	34.29	56.00	-21.71	QP
10 4.04985	1.82	9.65	0.06	10.00	21.53	46.00	-24.47	Average
1121.94626	17.94	9.71	0.12	10.00	37.77	60.00	-22.23	QP
1221.94726	4.53	9.71	0.12	10.00	24.36	50.00	-25.64	Average

Remarks: 1. Measured = Reading + Lisn Factor +Cable Loss+Atten_Fac.
 2. The emission levels that are 20dB below the official limit are not reported.

***Note: Pre-scan all mode and recorded the worst case results in this report (802.11b).

5.7. Antenna Requirements

5.7.1. Standard Applicable

According to § 15.203 & RSS-Gen, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

5.7.2. Antenna Connector Construction

The directional gains of antenna used for transmitting is 4.0dBi(For MIMO is 7.01dBi) which is a R-SMA antenna and no consideration of replacement. Please see EUT photo for details.

5.7.3. Results: Compliance.

6. LIST OF MEASURING EQUIPMENTS

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Cal Date	Due Date
EMC Receiver	R&S	ESCS 30	100174	9kHz – 2.75GHz	June 18, 2015	June 17, 2016
Signal analyzer	Agilent	E4448A(External mixers to 40GHz)	US44300469	9kHz~40GHz	July 16, 2015	July 15, 2016
Signal analyzer	Agilent	N9020A	MY50510140	9kHz~26.5GHz	October 27, 2015	October 27, 2016
LISN	MESS Tec	NNB-2/16Z	99079	9KHz-30MHz	June 18, 2015	June 17, 2016
LISN (Support Unit)	EMCO	3819/2NM	9703-1839	9KHz-30MHz	June 18, 2015	June 17, 2016
RF Cable-CON	UTIFLEX	3102-26886-4	CB049	9KHz-30MHz	June 18, 2015	June 17, 2016
ISN	SCHAFFNER	ISN ST08	21653	9KHz-30MHz	June 18, 2015	June 17, 2016
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30M-18GHz 3m	June 18, 2015	June 17, 2016
Amplifier	SCHAFFNER	COA9231A	18667	9kHz-2GHz	June 18, 2015	June 17, 2016
Amplifier	Agilent	8449B	3008A02120	1GHz-26.5GHz	July 16, 2015	July 15, 2016
Amplifier	MITEQ	AMF-6F-260400	9121372	26.5GHz-40GHz	July 16, 2015	July 15, 2016
Loop Antenna	R&S	HFH2-Z2	860004/001	9k-30MHz	June 18, 2015	June 17, 2016
By-log Antenna	SCHWARZBECK	VULB9163	9163-470	30MHz-1GHz	June 10, 2015	June 09, 2016
Horn Antenna	EMCO	3115	6741	1GHz-18GHz	June 10, 2015	June 09, 2016
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170154	15GHz-40GHz	June 10, 2015	June 09, 2016
RF Cable-R03m	Jye Bao	RG142	CB021	30MHz-1GHz	June 18, 2015	June 17, 2016
RF Cable-HIGH	SUHNER	SUCOFLEX 106	03CH03-HY	1GHz-40GHz	June 18, 2015	June 17, 2016
Power Meter	R&S	NRVS	100444	DC-40GHz	June 18, 2015	June 17, 2016
Power Sensor	R&S	NRV-Z51	100458	DC-30GHz	June 18, 2015	June 17, 2016
Power Sensor	R&S	NRV-Z32	10057	30MHz-6GHz	June 18, 2015	June 17, 2016
AC Power Source	HPC	HPA-500E	HPA-9100024	AC 0~300V	June 18, 2015	June 17, 2016
DC power Source	GW	GPC-6030D	C671845	DC 1V-60V	June 18, 2015	June 17, 2016
Temp. and Humidigy	Giant Force	GTH-225-20-S	MAB0103-00	N/A	June 18, 2015	June 17, 2016
RF CABLE-1m	JYE Bao	RG142	CB034-1m	20MHz-7GHz	June 18, 2015	June 17, 2016
RF CABLE-2m	JYE Bao	RG142	CB)35-2m	20MHz-1GHz	June 18, 2015	June 17, 2016

Note: All equipment through GRGT EST calibration

-----THE END OF REPORT-----