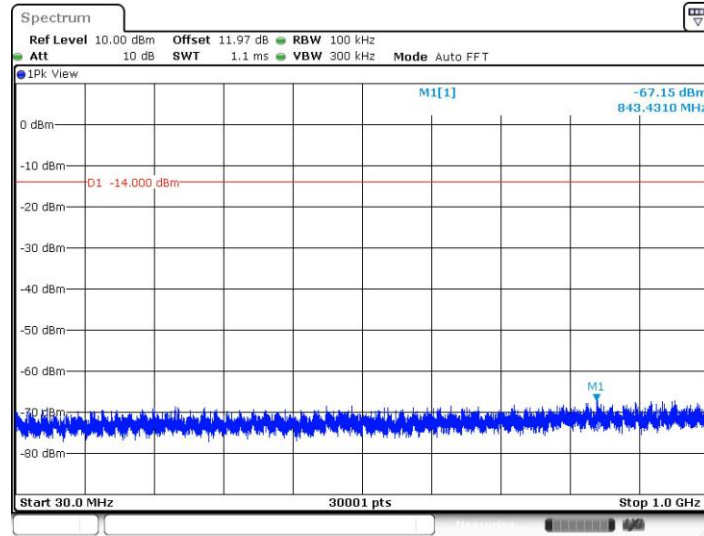
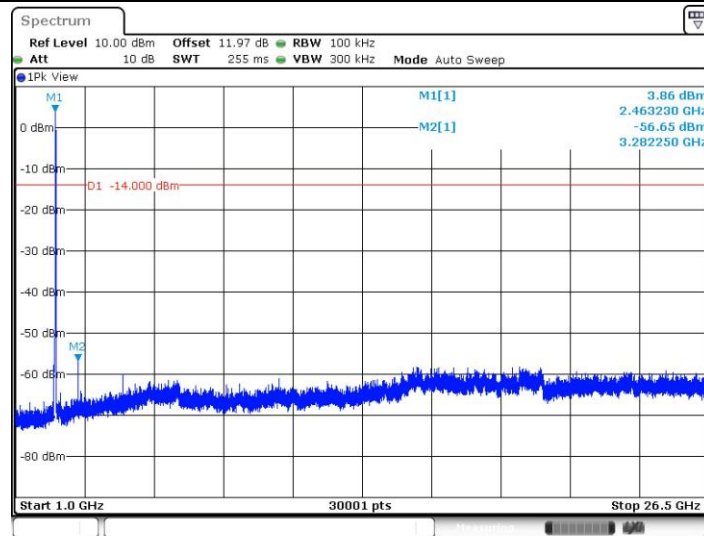


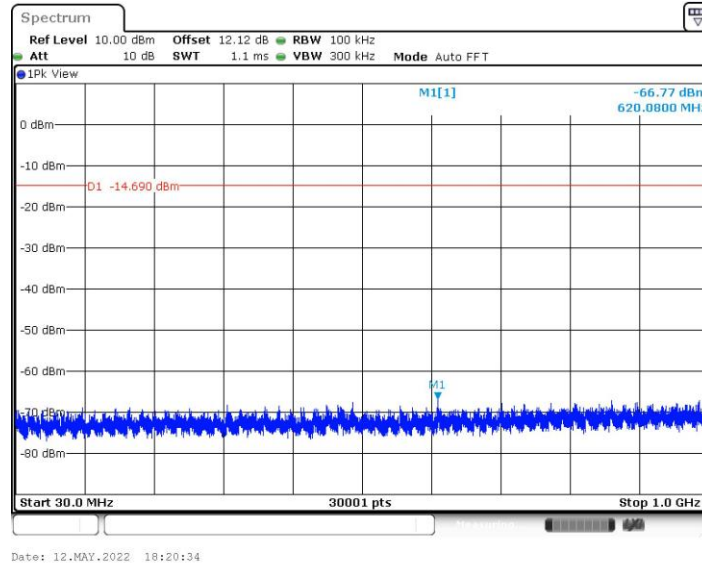
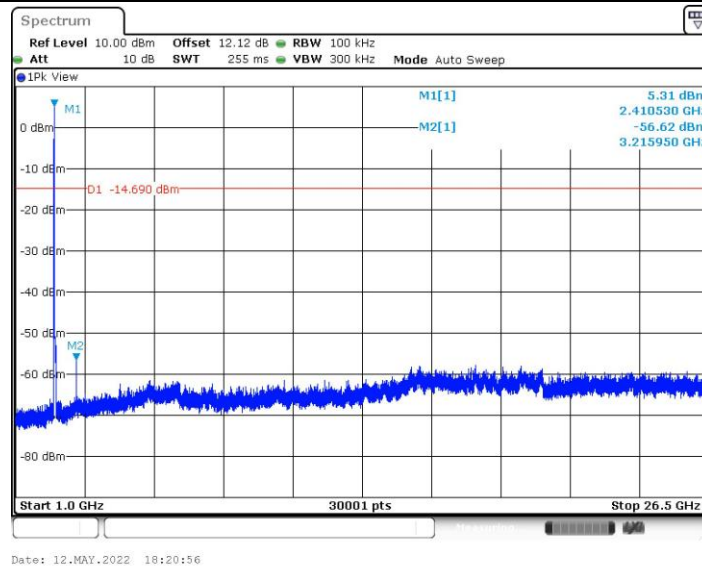


11G\_Ant1\_2462\_30~1000



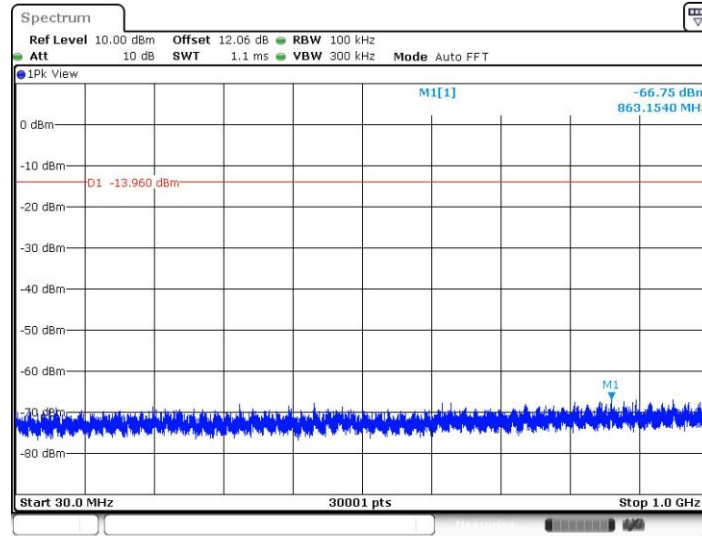
11G\_Ant1\_2462\_1000~26500



**11N20SISO\_Ant1\_2412\_30~1000**

**11N20SISO\_Ant1\_2412\_1000~26500**


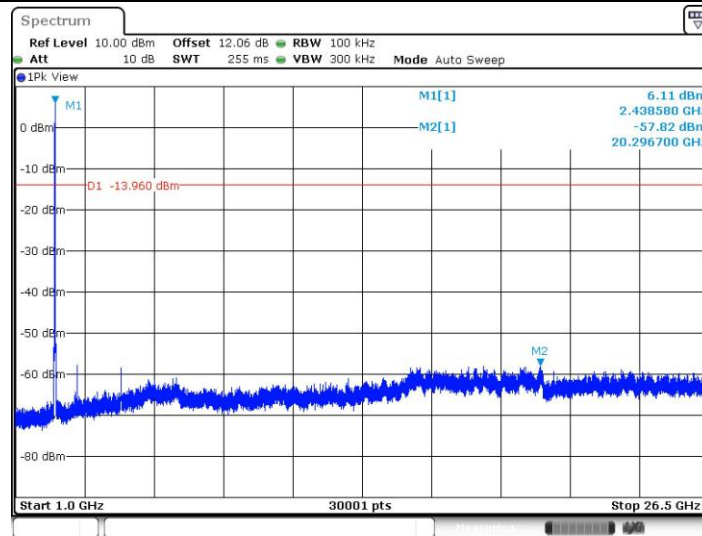


11N20SISO\_Ant1\_2437\_30~1000



Date: 12.MAY.2022 18:22:26

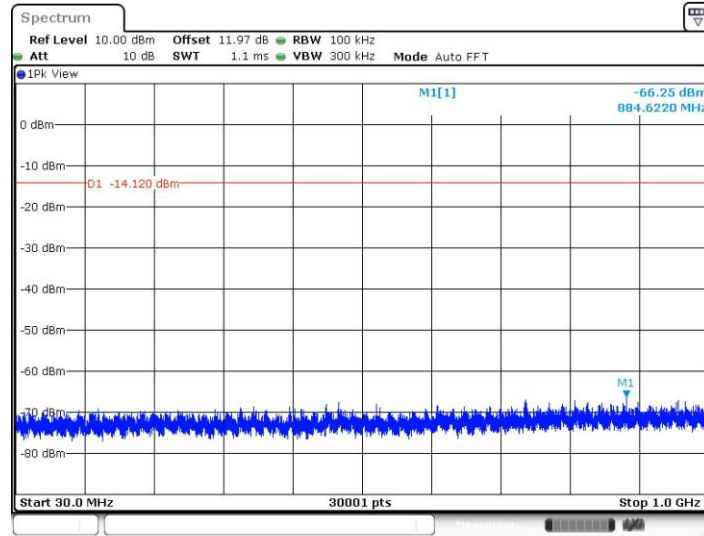
11N20SISO\_Ant1\_2437\_1000~26500



Date: 12.MAY.2022 18:22:48

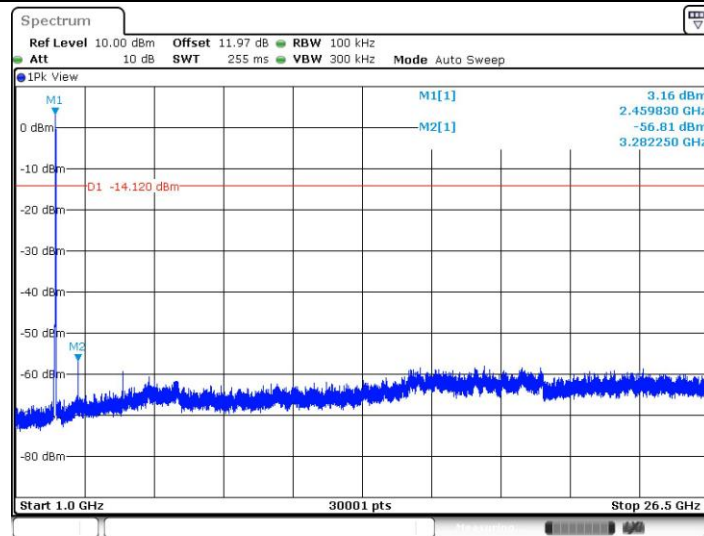


11N20SISO\_Ant1\_2462\_30~1000



Date: 12.MAY.2022 18:24:06

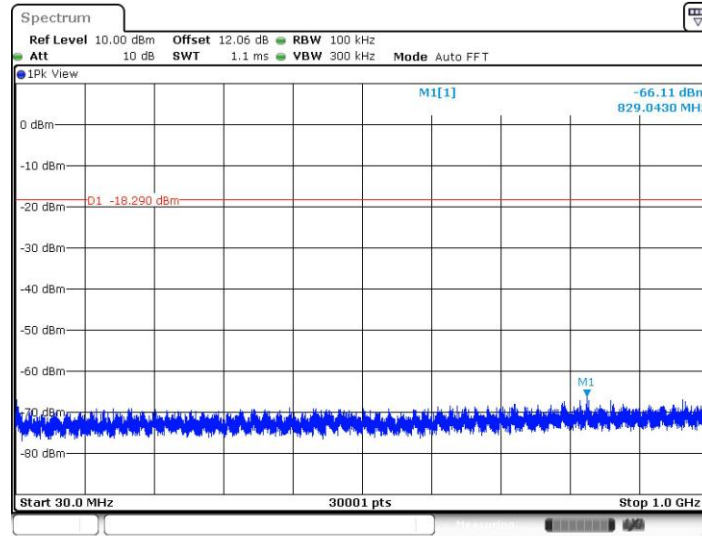
11N20SISO\_Ant1\_2462\_1000~26500



Date: 12.MAY.2022 18:24:28

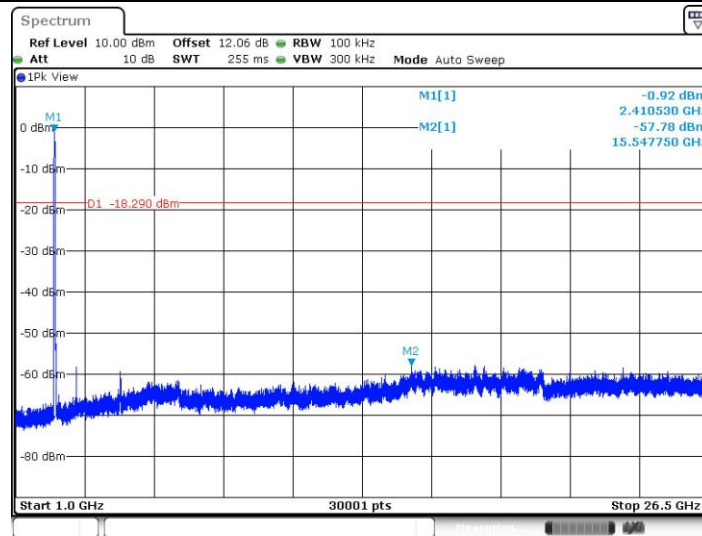


11N40SISO\_Ant1\_2422\_30~1000



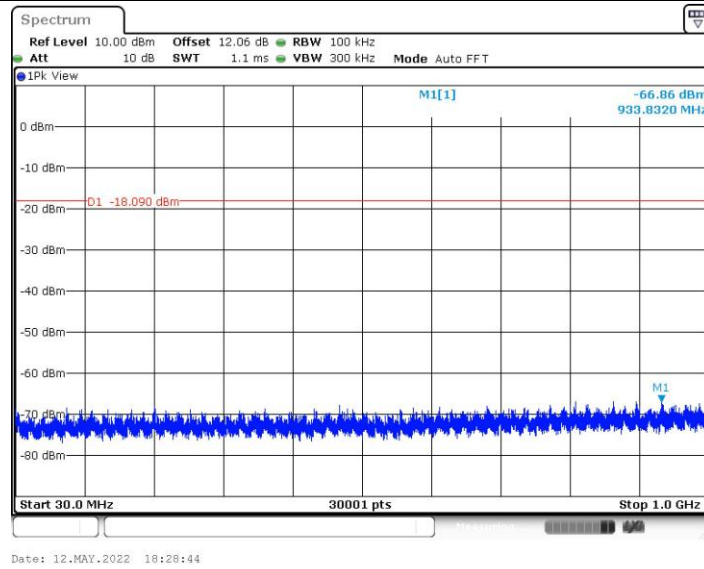
Date: 12.MAY.2022 18:27:16

11N40SISO\_Ant1\_2422\_1000~26500

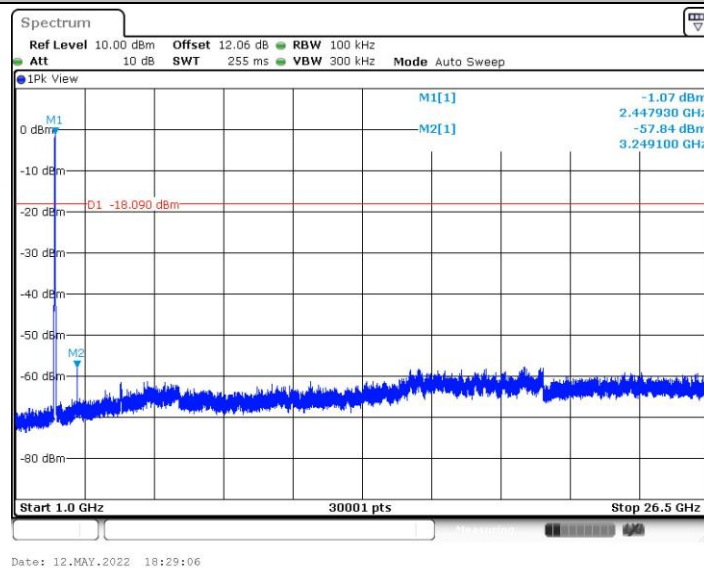


Date: 12.MAY.2022 18:27:38

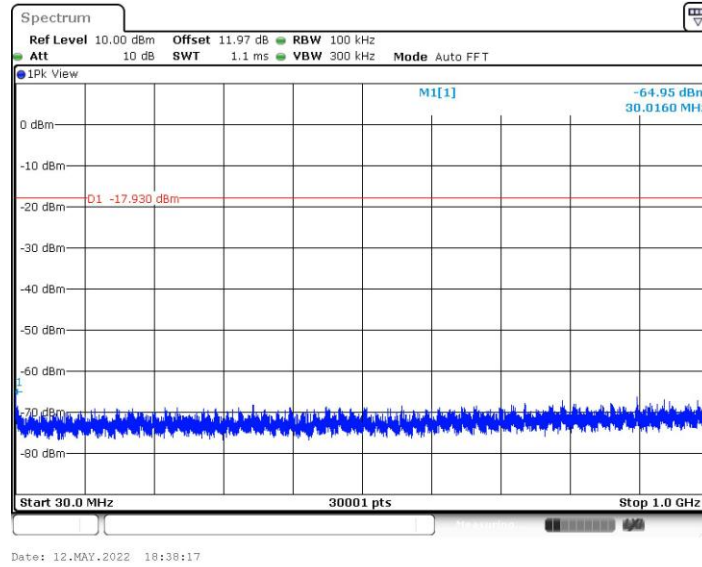
11N40SISO\_Ant1\_2437\_30~1000



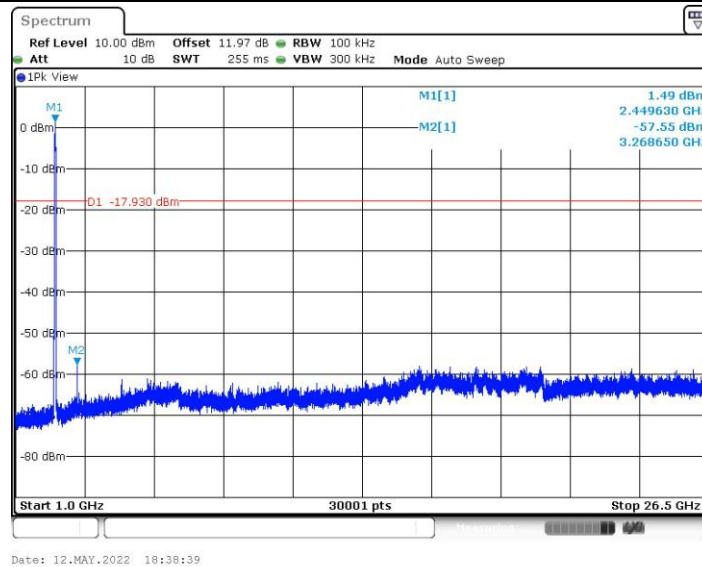
11N40SISO\_Ant1\_2437\_1000~26500



**11N40SISO\_Ant1\_2452\_30~1000**



**11N40SISO\_Ant1\_2452\_1000~26500**





## Duty Cycle

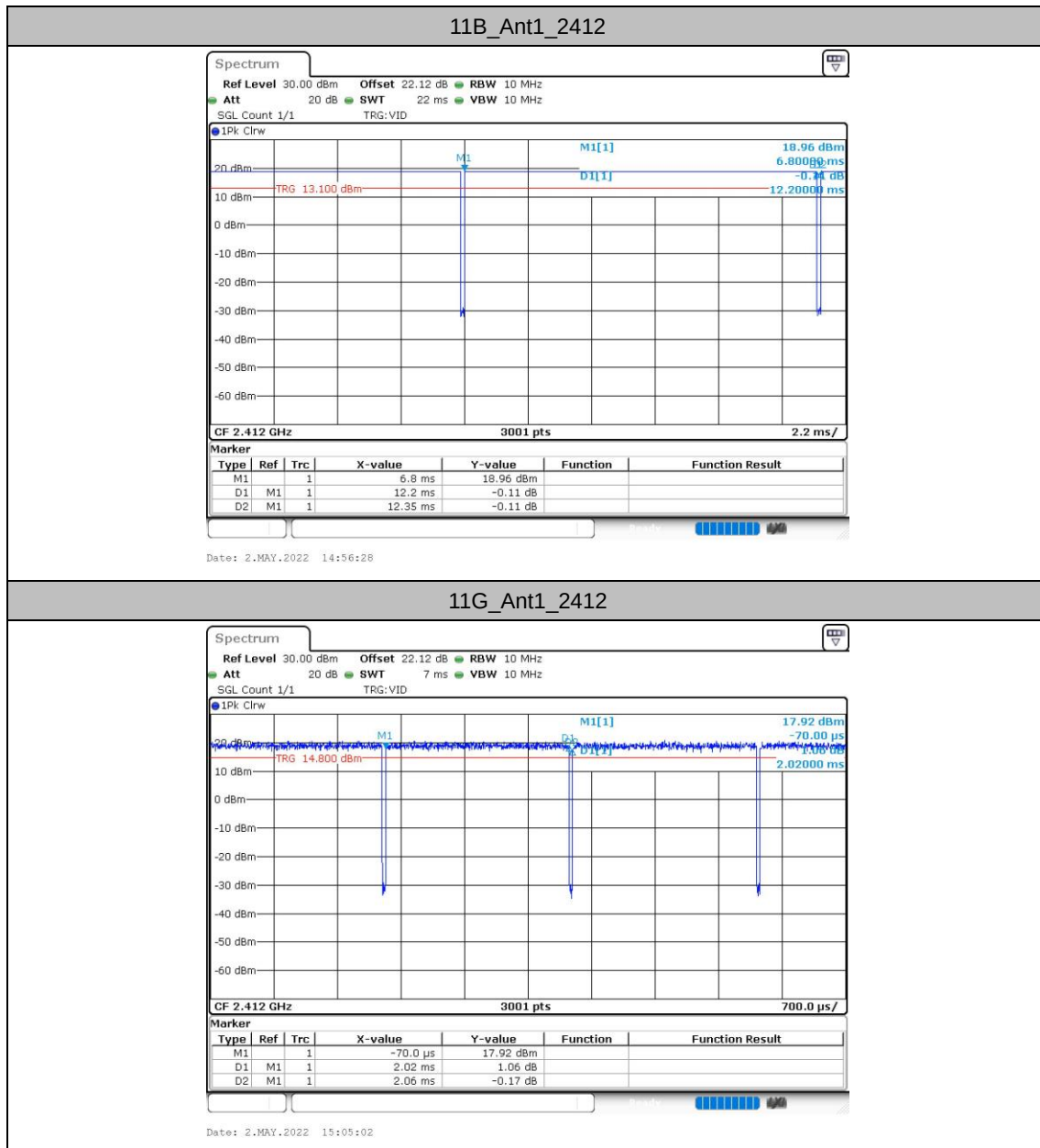
### Test Result

| TestMode  | Antenna | Freq(MHz) | Transmission<br>Duration [ms] | Transmission<br>Period [ms] | Duty<br>Cycle [%] | 1/T(kHz) | VBW<br>Setting |
|-----------|---------|-----------|-------------------------------|-----------------------------|-------------------|----------|----------------|
| 11B       | Ant1    | 2412      | 12.20                         | 12.35                       | 98.79             | -        | 10Hz           |
| 11G       | Ant1    | 2412      | 2.02                          | 2.06                        | 98.06             | -        | 10Hz           |
| 11N20SISO | Ant1    | 2412      | 1.88                          | 1.92                        | 97.92             | 0.532    | 1KHz           |
| 11N40SISO | Ant1    | 2422      | 0.93                          | 0.98                        | 94.90             | 1.075    | 3KHz           |



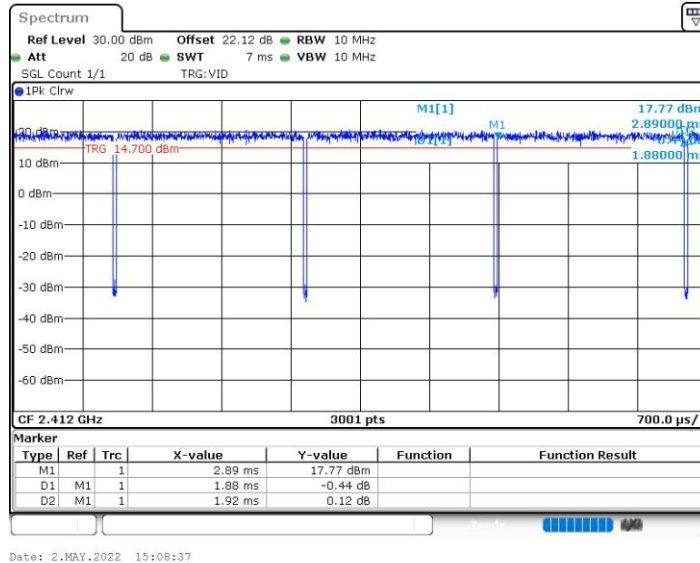


## Test Graphs

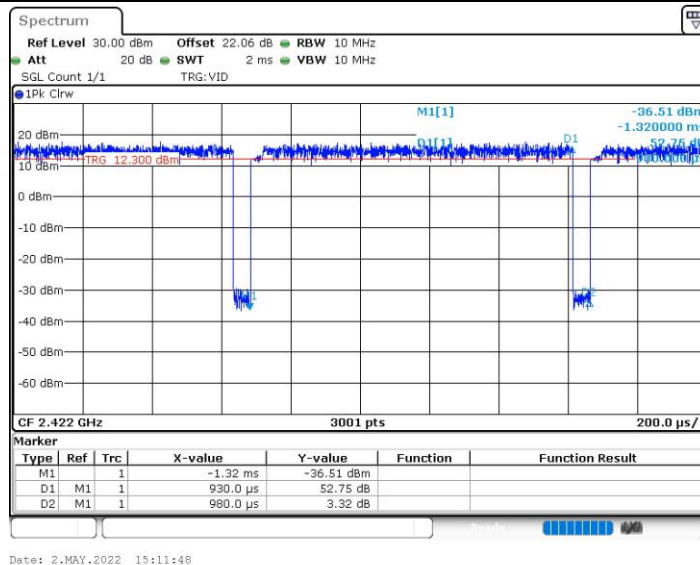




## 11N20SISO\_Ant1\_2412



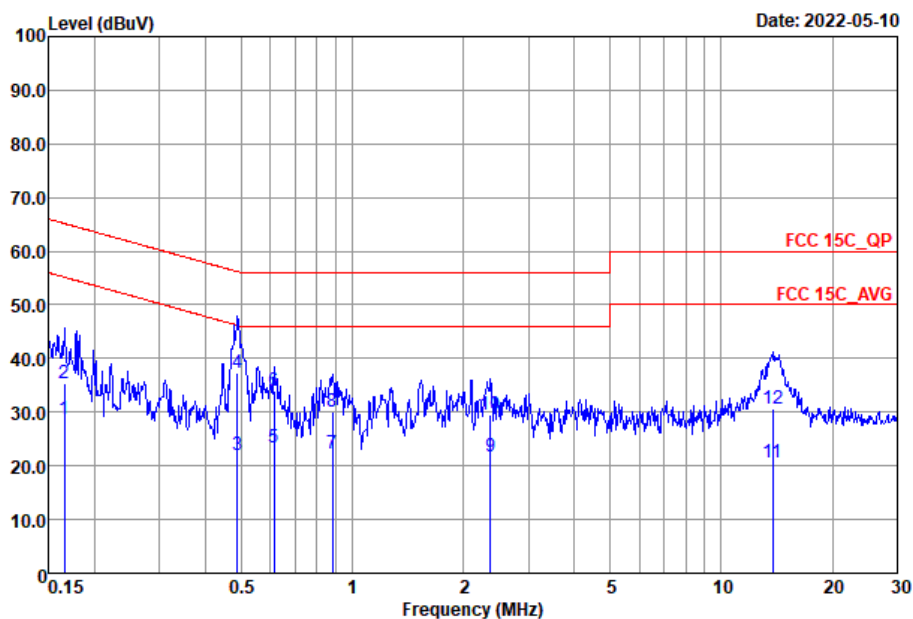
## 11N40SISO\_Ant1\_2422





## Appendix B. AC Conducted Emission Test Results

|                 |                                                                                 |                     |         |
|-----------------|---------------------------------------------------------------------------------|---------------------|---------|
| Test Engineer : | Zhang Xu                                                                        | Temperature :       | 22~25°C |
|                 |                                                                                 | Relative Humidity : | 50~55%  |
| Test Voltage :  | 120Vac / 60Hz                                                                   | Phase :             | Line    |
| Remark :        | All emissions not reported here are more than 10 dB below the prescribed limit. |                     |         |

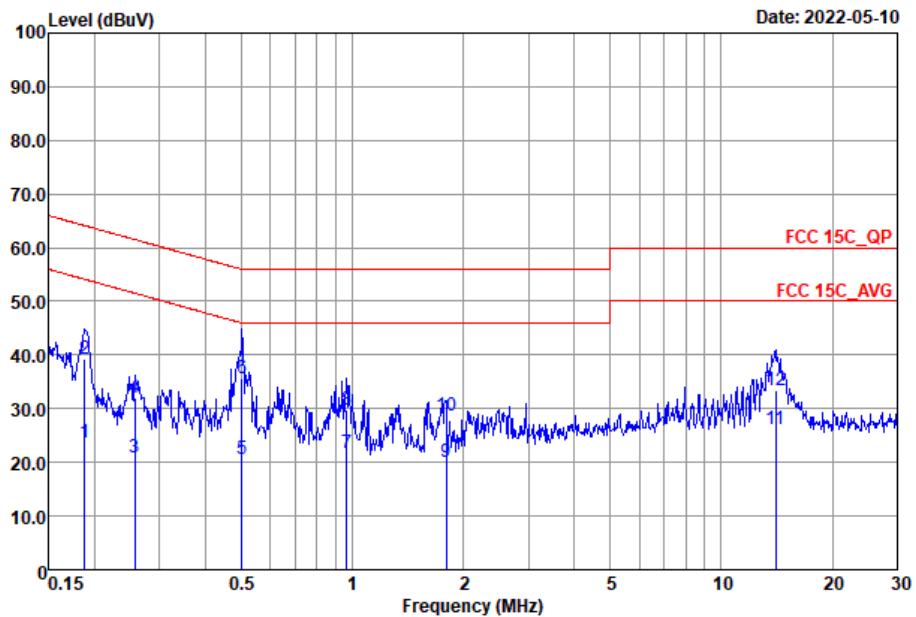


Site : CO02-SZ  
Condition : FCC 15C\_QP LISN\_2022\_L

|     | Freq  | Level | Over   | Limit | Read  | LISN   | Cable |         |
|-----|-------|-------|--------|-------|-------|--------|-------|---------|
|     | MHz   | dBuV  | Limit  | Line  | Level | Factor | Loss  | Remark  |
|     |       |       | dB     | dBuV  | dBuV  | dB     | dB    |         |
| 1   | 0.17  | 28.74 | -26.42 | 55.16 | 9.09  | 9.62   | 10.03 | Average |
| 2   | 0.17  | 35.44 | -29.72 | 65.16 | 15.79 | 9.62   | 10.03 | QP      |
| 3   | 0.49  | 21.89 | -24.30 | 46.19 | 2.20  | 9.65   | 10.04 | Average |
| 4 * | 0.49  | 37.39 | -18.80 | 56.19 | 17.70 | 9.65   | 10.04 | QP      |
| 5   | 0.61  | 23.30 | -22.70 | 46.00 | 3.60  | 9.66   | 10.04 | Average |
| 6   | 0.61  | 34.00 | -22.00 | 56.00 | 14.30 | 9.66   | 10.04 | QP      |
| 7   | 0.88  | 22.28 | -23.72 | 46.00 | 2.49  | 9.73   | 10.06 | Average |
| 8   | 0.88  | 29.98 | -26.02 | 56.00 | 10.19 | 9.73   | 10.06 | QP      |
| 9   | 2.37  | 21.64 | -24.36 | 46.00 | 1.80  | 9.78   | 10.06 | Average |
| 10  | 2.37  | 29.44 | -26.56 | 56.00 | 9.60  | 9.78   | 10.06 | QP      |
| 11  | 13.77 | 20.70 | -29.30 | 50.00 | 0.50  | 9.96   | 10.24 | Average |
| 12  | 13.77 | 30.70 | -29.30 | 60.00 | 10.50 | 9.96   | 10.24 | QP      |



|                 |                                                                                 |                     |         |
|-----------------|---------------------------------------------------------------------------------|---------------------|---------|
| Test Engineer : | Zhang Xu                                                                        | Temperature :       | 22~25°C |
|                 |                                                                                 | Relative Humidity : | 50~55%  |
| Test Voltage :  | 120Vac / 60Hz                                                                   | Phase :             | Neutral |
| Remark :        | All emissions not reported here are more than 10 dB below the prescribed limit. |                     |         |



Site : CO02-SZ  
Condition : FCC 15C\_QP LISN\_2022\_N

|     | Freq  | Level | Over   | Limit | Read  | LISN   | Cable | Remark  |
|-----|-------|-------|--------|-------|-------|--------|-------|---------|
|     | MHz   | dBuV  | Limit  | Line  | Level | Factor | Loss  |         |
|     |       |       | dB     | dBuV  | dBuV  | dB     | dB    |         |
| 1   | 0.19  | 23.75 | -30.36 | 54.11 | 4.11  | 9.62   | 10.02 | Average |
| 2   | 0.19  | 39.15 | -24.96 | 64.11 | 19.51 | 9.62   | 10.02 | QP      |
| 3   | 0.26  | 20.86 | -30.65 | 51.51 | 1.20  | 9.64   | 10.02 | Average |
| 4   | 0.26  | 32.06 | -29.45 | 61.51 | 12.40 | 9.64   | 10.02 | QP      |
| 5   | 0.50  | 20.65 | -25.35 | 46.00 | 1.00  | 9.61   | 10.04 | Average |
| 6 * | 0.50  | 35.55 | -20.45 | 56.00 | 15.90 | 9.61   | 10.04 | QP      |
| 7   | 0.96  | 21.78 | -24.22 | 46.00 | 2.10  | 9.62   | 10.06 | Average |
| 8   | 0.96  | 29.78 | -26.22 | 56.00 | 10.10 | 9.62   | 10.06 | QP      |
| 9   | 1.80  | 20.17 | -25.83 | 46.00 | 0.50  | 9.62   | 10.05 | Average |
| 10  | 1.80  | 28.57 | -27.43 | 56.00 | 8.90  | 9.62   | 10.05 | QP      |
| 11  | 14.06 | 26.09 | -23.91 | 50.00 | 6.00  | 9.85   | 10.24 | Average |
| 12  | 14.06 | 33.49 | -26.51 | 60.00 | 13.40 | 9.85   | 10.24 | QP      |

Note:

- Level(dBμV) = Read Level(dBμV) + LISN Factor(dB) + Cable Loss(dB)
- Over Limit(dB) = Level(dBμV) – Limit Line(dBμV)



## Appendix C. Radiated Spurious Emission

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

| WIFI Ant.                   | Note | Frequency | Level      | Margin | Limit Line | Read Level | Antenna Factor | Path Loss | Preampl Factor | Ant Pos | Table Pos | Peak Avg. | Pol.    |
|-----------------------------|------|-----------|------------|--------|------------|------------|----------------|-----------|----------------|---------|-----------|-----------|---------|
| 1                           |      | ( MHz )   | ( dBμV/m ) | ( dB ) | ( dBμV/m ) | ( dBμV )   | ( dB/m )       | ( dB )    | ( dB )         | ( cm )  | ( deg )   | ( P/A )   | ( H/V ) |
| 802.11b<br>CH 01<br>2412MHz |      | 2338.875  | 53         | -21    | 74         | 50.02      | 31.86          | 4.81      | 33.69          | 112     | 15        | P         | H       |
|                             |      | 2390      | 39.94      | -14.06 | 54         | 36.79      | 31.9           | 4.91      | 33.66          | 112     | 15        | A         | H       |
|                             | *    | 2412      | 109.97     | -      | -          | 106.72     | 31.97          | 4.93      | 33.65          | 112     | 15        | P         | H       |
|                             | *    | 2412      | 106.91     | -      | -          | 103.66     | 31.97          | 4.93      | 33.65          | 112     | 15        | A         | H       |
|                             |      | 2386.335  | 52.79      | -21.21 | 74         | 49.64      | 31.9           | 4.91      | 33.66          | 311     | 231       | P         | V       |
|                             |      | 2390      | 39.04      | -14.96 | 54         | 35.89      | 31.9           | 4.91      | 33.66          | 311     | 231       | A         | V       |
|                             | *    | 2412      | 105.4      | -      | -          | 102.15     | 31.97          | 4.93      | 33.65          | 311     | 231       | P         | V       |
|                             | *    | 2412      | 102.36     | -      | -          | 99.11      | 31.97          | 4.93      | 33.65          | 311     | 231       | A         | V       |
| 802.11b<br>CH 06<br>2437MHz |      | 2388.54   | 52.48      | -21.52 | 74         | 49.33      | 31.9           | 4.91      | 33.66          | 112     | 14        | P         | H       |
|                             |      | 2389.8    | 39.03      | -14.97 | 54         | 35.88      | 31.9           | 4.91      | 33.66          | 112     | 14        | A         | H       |
|                             | *    | 2437      | 109.47     | -      | -          | 106.04     | 32.12          | 4.96      | 33.65          | 112     | 14        | P         | H       |
|                             | *    | 2437      | 106.41     | -      | -          | 102.98     | 32.12          | 4.96      | 33.65          | 112     | 14        | A         | H       |
|                             |      | 2483.55   | 52.45      | -21.55 | 74         | 48.95      | 32.13          | 4.99      | 33.62          | 112     | 14        | P         | H       |
|                             |      | 2483.5    | 40.09      | -13.91 | 54         | 36.59      | 32.13          | 4.99      | 33.62          | 112     | 14        | A         | H       |
|                             |      | 2388.4    | 52.16      | -21.84 | 74         | 49.01      | 31.9           | 4.91      | 33.66          | 310     | 260       | P         | V       |
|                             |      | 2389.52   | 38.78      | -15.22 | 54         | 35.63      | 31.9           | 4.91      | 33.66          | 310     | 260       | A         | V       |
|                             | *    | 2437      | 106.04     | -      | -          | 102.61     | 32.12          | 4.96      | 33.65          | 310     | 260       | P         | V       |
|                             | *    | 2437      | 102.9      | -      | -          | 99.47      | 32.12          | 4.96      | 33.65          | 310     | 260       | A         | V       |
|                             |      | 2484.11   | 53.37      | -20.63 | 74         | 49.87      | 32.13          | 4.99      | 33.62          | 310     | 260       | P         | V       |
|                             |      | 2483.62   | 39.6       | -14.4  | 54         | 36.1       | 32.13          | 4.99      | 33.62          | 310     | 260       | A         | V       |



|                             |                                                                                             |         |        |        |    |        |       |      |       |     |     |   |   |
|-----------------------------|---------------------------------------------------------------------------------------------|---------|--------|--------|----|--------|-------|------|-------|-----|-----|---|---|
| 802.11b<br>CH 11<br>2462MHz | *                                                                                           | 2462    | 109.34 | -      | -  | 105.81 | 32.18 | 4.98 | 33.63 | 107 | 14  | P | H |
|                             | *                                                                                           | 2462    | 106.11 | -      | -  | 102.58 | 32.18 | 4.98 | 33.63 | 107 | 14  | A | H |
|                             |                                                                                             | 2487.08 | 56.48  | -17.52 | 74 | 52.98  | 32.13 | 4.99 | 33.62 | 107 | 14  | P | H |
|                             |                                                                                             | 2483.52 | 42.42  | -11.58 | 54 | 38.92  | 32.13 | 4.99 | 33.62 | 107 | 14  | A | H |
|                             | *                                                                                           | 2462    | 107.18 | -      | -  | 103.65 | 32.18 | 4.98 | 33.63 | 313 | 263 | P | V |
|                             | *                                                                                           | 2462    | 103.98 | -      | -  | 100.45 | 32.18 | 4.98 | 33.63 | 313 | 263 | A | V |
|                             |                                                                                             | 2486.92 | 55.8   | -18.2  | 74 | 52.3   | 32.13 | 4.99 | 33.62 | 313 | 263 | P | V |
|                             |                                                                                             | 2483.52 | 41.19  | -12.81 | 54 | 37.69  | 32.13 | 4.99 | 33.62 | 313 | 263 | A | V |
| Remark                      | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |         |        |        |    |        |       |      |       |     |     |   |   |

## 2.4GHz 2400~2483.5MHz

## WIFI 802.11b (Harmonic @ 3m)

| WIFI Ant.                   | Note                                                                                        | Frequency | Level      | Margin | Limit Line | Read Level | Antenna Factor | Path Loss | Preamp Factor | Ant Pos | Table Pos | Peak Avg. | Pol.    |
|-----------------------------|---------------------------------------------------------------------------------------------|-----------|------------|--------|------------|------------|----------------|-----------|---------------|---------|-----------|-----------|---------|
| 1                           |                                                                                             | ( MHz )   | ( dBμV/m ) | ( dB ) | ( dBμV/m ) | ( dBμV )   | ( dB/m )       | ( dB )    | ( dB )        | ( cm )  | ( deg )   | ( P/A )   | ( H/V ) |
| 802.11b<br>CH 01<br>2412MHz |                                                                                             | 4824      | 49.39      | -24.61 | 74         | 61.34      | 33.85          | 7.11      | 52.91         | -       | -         | P         | H       |
|                             |                                                                                             | 4824      | 51.74      | -22.26 | 74         | 63.69      | 33.85          | 7.11      | 52.91         | 327     | 214       | P         | V       |
| 802.11b<br>CH 06<br>2437MHz |                                                                                             | 4874      | 50.64      | -23.36 | 74         | 62.49      | 33.8           | 7.19      | 52.84         | -       | -         | P         | H       |
|                             |                                                                                             | 7311      | 44.42      | -29.58 | 74         | 54.16      | 35.62          | 8.76      | 54.12         | -       | -         | P         | H       |
|                             |                                                                                             | 4874      | 50         | -24    | 74         | 61.85      | 33.8           | 7.19      | 52.84         | -       | -         | P         | V       |
|                             |                                                                                             | 7311      | 42.83      | -31.17 | 74         | 52.57      | 35.62          | 8.76      | 54.12         | -       | -         | P         | V       |
| 802.11b<br>CH 11<br>2462MHz |                                                                                             | 4924      | 45.36      | -28.64 | 74         | 57.12      | 33.8           | 7.22      | 52.78         | -       | -         | P         | H       |
|                             |                                                                                             | 7386      | 43.73      | -30.27 | 74         | 53.2       | 35.65          | 8.95      | 54.07         | -       | -         | P         | H       |
|                             |                                                                                             | 4924      | 48.26      | -25.74 | 74         | 60.02      | 33.8           | 7.22      | 52.78         | -       | -         | P         | V       |
|                             |                                                                                             | 7386      | 42.8       | -31.2  | 74         | 52.27      | 35.65          | 8.95      | 54.07         | -       | -         | P         | V       |
| Remark                      | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |        |            |            |                |           |               |         |           |           |         |



**2.4GHz 2400~2483.5MHz**  
**WIFI 802.11g (Band Edge @ 3m)**

| WIFI<br>Ant.<br>1                    | Note | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Margin<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Path<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|--------------------------------------|------|----------------------|---------------------|------------------|-----------------------------|---------------------------|-------------------------------|------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| <b>802.11g<br/>CH 01<br/>2412MHz</b> |      | 2390                 | 59.24               | -14.76           | 74                          | 56.09                     | 31.9                          | 4.91                   | 33.66                      | 140                  | 14                      | P                       | H               |
|                                      |      | 2390                 | 43.76               | -10.24           | 54                          | 40.61                     | 31.9                          | 4.91                   | 33.66                      | 140                  | 14                      | A                       | H               |
|                                      | *    | 2412                 | 111.1               | -                | -                           | 107.85                    | 31.97                         | 4.93                   | 33.65                      | 140                  | 14                      | P                       | H               |
|                                      | *    | 2412                 | 103.07              | -                | -                           | 99.82                     | 31.97                         | 4.93                   | 33.65                      | 140                  | 14                      | A                       | H               |
|                                      |      | 2389.905             | 57.21               | -16.79           | 74                          | 54.06                     | 31.9                          | 4.91                   | 33.66                      | 366                  | 261                     | P                       | V               |
|                                      |      | 2390                 | 42.35               | -11.65           | 54                          | 39.2                      | 31.9                          | 4.91                   | 33.66                      | 366                  | 261                     | A                       | V               |
|                                      | *    | 2412                 | 108.76              | -                | -                           | 105.51                    | 31.97                         | 4.93                   | 33.65                      | 366                  | 261                     | P                       | V               |
|                                      | *    | 2412                 | 100.51              | -                | -                           | 97.26                     | 31.97                         | 4.93                   | 33.65                      | 366                  | 261                     | A                       | V               |
| <b>802.11g<br/>CH 06<br/>2437MHz</b> |      | 2315.6               | 52.93               | -21.07           | 74                          | 50.14                     | 31.76                         | 4.74                   | 33.71                      | 111                  | 14                      | P                       | H               |
|                                      |      | 2389.94              | 39.68               | -14.32           | 54                          | 36.53                     | 31.9                          | 4.91                   | 33.66                      | 111                  | 14                      | A                       | H               |
|                                      | *    | 2437                 | 111.06              | -                | -                           | 107.63                    | 32.12                         | 4.96                   | 33.65                      | 111                  | 14                      | P                       | H               |
|                                      | *    | 2437                 | 102.9               | -                | -                           | 99.47                     | 32.12                         | 4.96                   | 33.65                      | 111                  | 14                      | A                       | H               |
|                                      |      | 2483.5               | 55.36               | -18.64           | 74                          | 51.86                     | 32.13                         | 4.99                   | 33.62                      | 111                  | 14                      | P                       | H               |
|                                      |      | 2483.5               | 42.53               | -11.47           | 54                          | 39.03                     | 32.13                         | 4.99                   | 33.62                      | 111                  | 14                      | A                       | H               |
|                                      |      | 2387.98              | 52.49               | -21.51           | 74                          | 49.34                     | 31.9                          | 4.91                   | 33.66                      | 358                  | 262                     | P                       | V               |
|                                      |      | 2389.94              | 39.03               | -14.97           | 54                          | 35.88                     | 31.9                          | 4.91                   | 33.66                      | 358                  | 262                     | A                       | V               |
|                                      | *    | 2437                 | 108.28              | -                | -                           | 104.85                    | 32.12                         | 4.96                   | 33.65                      | 358                  | 262                     | P                       | V               |
|                                      | *    | 2437                 | 100.5               | -                | -                           | 97.07                     | 32.12                         | 4.96                   | 33.65                      | 358                  | 262                     | A                       | V               |
|                                      |      | 2485.16              | 54.35               | -19.65           | 74                          | 50.85                     | 32.13                         | 4.99                   | 33.62                      | 358                  | 262                     | P                       | V               |
|                                      |      | 2483.5               | 41.38               | -12.62           | 54                          | 37.88                     | 32.13                         | 4.99                   | 33.62                      | 358                  | 262                     | A                       | V               |



|                             |                                                                                             |         |        |        |    |        |       |      |       |     |     |   |   |
|-----------------------------|---------------------------------------------------------------------------------------------|---------|--------|--------|----|--------|-------|------|-------|-----|-----|---|---|
| 802.11g<br>CH 11<br>2462MHz | *                                                                                           | 2462    | 110.39 | -      | -  | 106.86 | 32.18 | 4.98 | 33.63 | 136 | 14  | P | H |
|                             | *                                                                                           | 2462    | 102.32 | -      | -  | 98.79  | 32.18 | 4.98 | 33.63 | 136 | 14  | A | H |
|                             |                                                                                             | 2484.04 | 58.99  | -15.01 | 74 | 55.49  | 32.13 | 4.99 | 33.62 | 136 | 14  | P | H |
|                             |                                                                                             | 2483.52 | 44.81  | -9.19  | 54 | 41.31  | 32.13 | 4.99 | 33.62 | 136 | 14  | A | H |
|                             | *                                                                                           | 2462    | 109.69 | -      | -  | 106.16 | 32.18 | 4.98 | 33.63 | 363 | 262 | P | V |
|                             | *                                                                                           | 2462    | 101.22 | -      | -  | 97.69  | 32.18 | 4.98 | 33.63 | 363 | 262 | A | V |
|                             |                                                                                             | 2483.76 | 56.43  | -17.57 | 74 | 52.93  | 32.13 | 4.99 | 33.62 | 363 | 262 | P | V |
|                             |                                                                                             | 2483.52 | 43.08  | -10.92 | 54 | 39.58  | 32.13 | 4.99 | 33.62 | 363 | 262 | A | V |
| Remark                      | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |         |        |        |    |        |       |      |       |     |     |   |   |

## 2.4GHz 2400~2483.5MHz

## WIFI 802.11g (Harmonic @ 3m)

| WIFI Ant.                   | Note                                                                                        | Frequency | Level      | Margin | Limit Line | Read Level | Antenna Factor | Path Loss | Preamp Factor | Ant Pos | Table Pos | Peak Avg. | Pol.    |
|-----------------------------|---------------------------------------------------------------------------------------------|-----------|------------|--------|------------|------------|----------------|-----------|---------------|---------|-----------|-----------|---------|
| 1                           |                                                                                             | ( MHz )   | ( dBμV/m ) | ( dB ) | ( dBμV/m ) | ( dBμV )   | ( dB/m )       | ( dB )    | ( dB )        | ( cm )  | ( deg )   | ( P/A )   | ( H/V ) |
| 802.11g<br>CH 01<br>2412MHz |                                                                                             | 4824      | 45.52      | -28.48 | 74         | 57.47      | 33.85          | 7.11      | 52.91         | -       | -         | P         | H       |
|                             |                                                                                             | 4824      | 46.61      | -27.39 | 74         | 58.56      | 33.85          | 7.11      | 52.91         | -       | -         | P         | V       |
| 802.11g<br>CH 06<br>2437MHz |                                                                                             | 4874      | 44.86      | -29.14 | 74         | 56.71      | 33.8           | 7.19      | 52.84         | -       | -         | P         | H       |
|                             |                                                                                             | 7311      | 43.51      | -30.49 | 74         | 53.25      | 35.62          | 8.76      | 54.12         | -       | -         | P         | H       |
|                             |                                                                                             | 4874      | 45.53      | -28.47 | 74         | 57.38      | 33.8           | 7.19      | 52.84         | -       | -         | P         | V       |
|                             |                                                                                             | 7311      | 42.62      | -31.38 | 74         | 52.36      | 35.62          | 8.76      | 54.12         | -       | -         | P         | V       |
| 802.11g<br>CH 11<br>2462MHz |                                                                                             | 4924      | 43.72      | -30.28 | 74         | 55.48      | 33.8           | 7.22      | 52.78         | -       | -         | P         | H       |
|                             |                                                                                             | 7386      | 43.69      | -30.31 | 74         | 53.16      | 35.65          | 8.95      | 54.07         | -       | -         | P         | H       |
|                             |                                                                                             | 4924      | 45.02      | -28.98 | 74         | 56.78      | 33.8           | 7.22      | 52.78         | -       | -         | P         | V       |
|                             |                                                                                             | 7386      | 44.43      | -29.57 | 74         | 53.9       | 35.65          | 8.95      | 54.07         | -       | -         | P         | V       |
| Remark                      | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |        |            |            |                |           |               |         |           |           |         |





## 2.4GHz 2400~2483.5MHz

## WIFI 802.11n HT20 (Band Edge @ 3m)

| WIFI<br>Ant.<br>1                   | Note | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Margin<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Path<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|-------------------------------------|------|----------------------|---------------------|------------------|-----------------------------|---------------------------|-------------------------------|------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11n<br>HT20<br>CH 01<br>2412MHz |      | 2389.905             | 60.98               | -13.02           | 74                          | 57.83                     | 31.9                          | 4.91                   | 33.66                      | 114                  | 14                      | P                       | H               |
|                                     |      | 2389.905             | 46.15               | -7.85            | 54                          | 43                        | 31.9                          | 4.91                   | 33.66                      | 114                  | 14                      | A                       | H               |
|                                     | *    | 2412                 | 111.08              | -                | -                           | 107.83                    | 31.97                         | 4.93                   | 33.65                      | 114                  | 14                      | P                       | H               |
|                                     | *    | 2412                 | 103.04              | -                | -                           | 99.79                     | 31.97                         | 4.93                   | 33.65                      | 114                  | 14                      | A                       | H               |
|                                     |      | 2389.59              | 57.16               | -16.84           | 74                          | 54.01                     | 31.9                          | 4.91                   | 33.66                      | 366                  | 263                     | P                       | V               |
|                                     |      | 2389.905             | 43.68               | -10.32           | 54                          | 40.53                     | 31.9                          | 4.91                   | 33.66                      | 366                  | 263                     | A                       | V               |
|                                     | *    | 2412                 | 107.79              | -                | -                           | 104.54                    | 31.97                         | 4.93                   | 33.65                      | 366                  | 263                     | P                       | V               |
|                                     | *    | 2412                 | 100.09              | -                | -                           | 96.84                     | 31.97                         | 4.93                   | 33.65                      | 366                  | 263                     | A                       | V               |
| 802.11n<br>HT20<br>CH 06<br>2437MHz |      | 2331.98              | 52.77               | -21.23           | 74                          | 49.87                     | 31.83                         | 4.78                   | 33.71                      | 138                  | 14                      | P                       | H               |
|                                     |      | 2389.8               | 40.2                | -13.8            | 54                          | 37.05                     | 31.9                          | 4.91                   | 33.66                      | 138                  | 14                      | A                       | H               |
|                                     | *    | 2437                 | 111.61              | -                | -                           | 108.18                    | 32.12                         | 4.96                   | 33.65                      | 138                  | 14                      | P                       | H               |
|                                     | *    | 2437                 | 102.76              | -                | -                           | 99.33                     | 32.12                         | 4.96                   | 33.65                      | 138                  | 14                      | A                       | H               |
|                                     |      | 2483.55              | 54.34               | -19.66           | 74                          | 50.84                     | 32.13                         | 4.99                   | 33.62                      | 138                  | 14                      | P                       | H               |
|                                     |      | 2483.76              | 42.92               | -11.08           | 54                          | 39.42                     | 32.13                         | 4.99                   | 33.62                      | 138                  | 14                      | A                       | H               |
|                                     |      | 2375.94              | 52.07               | -21.93           | 74                          | 48.97                     | 31.9                          | 4.88                   | 33.68                      | 358                  | 243                     | P                       | V               |
|                                     |      | 2389.52              | 40.12               | -13.88           | 54                          | 36.97                     | 31.9                          | 4.91                   | 33.66                      | 358                  | 243                     | A                       | V               |
|                                     | *    | 2437                 | 107.59              | -                | -                           | 104.16                    | 32.12                         | 4.96                   | 33.65                      | 358                  | 243                     | P                       | V               |
|                                     | *    | 2437                 | 99.96               | -                | -                           | 96.53                     | 32.12                         | 4.96                   | 33.65                      | 358                  | 243                     | A                       | V               |
|                                     |      | 2484.32              | 54.71               | -19.29           | 74                          | 51.21                     | 32.13                         | 4.99                   | 33.62                      | 358                  | 243                     | P                       | V               |
|                                     |      | 2484.04              | 42.46               | -11.54           | 54                          | 38.96                     | 32.13                         | 4.99                   | 33.62                      | 358                  | 243                     | A                       | V               |



|                                     |                                                                                             |         |        |        |    |        |       |      |       |     |     |   |   |
|-------------------------------------|---------------------------------------------------------------------------------------------|---------|--------|--------|----|--------|-------|------|-------|-----|-----|---|---|
| 802.11n<br>HT20<br>CH 11<br>2462MHz | *                                                                                           | 2462    | 111.19 | -      | -  | 107.66 | 32.18 | 4.98 | 33.63 | 105 | 14  | P | H |
|                                     | *                                                                                           | 2462    | 102.34 | -      | -  | 98.81  | 32.18 | 4.98 | 33.63 | 105 | 14  | A | H |
|                                     |                                                                                             | 2483.52 | 60     | -14    | 74 | 56.5   | 32.13 | 4.99 | 33.62 | 105 | 14  | P | H |
|                                     |                                                                                             | 2483.56 | 48.33  | -5.67  | 54 | 44.83  | 32.13 | 4.99 | 33.62 | 105 | 14  | A | H |
|                                     | *                                                                                           | 2462    | 109.14 | -      | -  | 105.61 | 32.18 | 4.98 | 33.63 | 363 | 261 | P | V |
|                                     | *                                                                                           | 2462    | 100.93 | -      | -  | 97.4   | 32.18 | 4.98 | 33.63 | 363 | 261 | A | V |
|                                     |                                                                                             | 2484.04 | 57.39  | -16.61 | 74 | 53.89  | 32.13 | 4.99 | 33.62 | 363 | 261 | P | V |
|                                     |                                                                                             | 2483.52 | 45.46  | -8.54  | 54 | 41.96  | 32.13 | 4.99 | 33.62 | 363 | 261 | A | V |
| Remark                              | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |         |        |        |    |        |       |      |       |     |     |   |   |

**2.4GHz 2400~2483.5MHz**  
**WIFI 802.11n HT20 (Harmonic @ 3m)**

| WIFI Ant.                           | Note                                                                                        | Frequency | Level      | Margin | Limit Line | Read Level | Antenna Factor | Path Loss | Preamp Factor | Ant Pos | Table Pos | Peak Avg. | Pol.    |
|-------------------------------------|---------------------------------------------------------------------------------------------|-----------|------------|--------|------------|------------|----------------|-----------|---------------|---------|-----------|-----------|---------|
| 1                                   |                                                                                             | ( MHz )   | ( dBμV/m ) | ( dB ) | ( dBμV/m ) | ( dBμV )   | ( dB/m )       | ( dB )    | ( dB )        | ( cm )  | ( deg )   | ( P/A )   | ( H/V ) |
| 802.11n<br>HT20<br>CH 01<br>2412MHz |                                                                                             | 4824      | 46.31      | -27.69 | 74         | 58.26      | 33.85          | 7.11      | 52.91         | -       | -         | P         | H       |
|                                     |                                                                                             | 4824      | 45.51      | -28.49 | 74         | 57.46      | 33.85          | 7.11      | 52.91         | -       | -         | P         | V       |
| 802.11n<br>HT20<br>CH 06<br>2437MHz |                                                                                             | 4874      | 45.64      | -28.36 | 74         | 57.49      | 33.8           | 7.19      | 52.84         | -       | -         | P         | H       |
|                                     |                                                                                             | 7311      | 43.15      | -30.85 | 74         | 52.89      | 35.62          | 8.76      | 54.12         | -       | -         | P         | H       |
|                                     |                                                                                             | 4874      | 45.24      | -28.76 | 74         | 57.09      | 33.8           | 7.19      | 52.84         | -       | -         | P         | V       |
|                                     |                                                                                             | 7311      | 42.74      | -31.26 | 74         | 52.48      | 35.62          | 8.76      | 54.12         | -       | -         | P         | V       |
| 802.11n<br>HT20<br>CH 11<br>2462MHz |                                                                                             | 4924      | 44.05      | -29.95 | 74         | 55.81      | 33.8           | 7.22      | 52.78         | -       | -         | P         | H       |
|                                     |                                                                                             | 7386      | 43.09      | -30.91 | 74         | 52.56      | 35.65          | 8.95      | 54.07         | -       | -         | P         | H       |
|                                     |                                                                                             | 4924      | 45.08      | -28.92 | 74         | 56.84      | 33.8           | 7.22      | 52.78         | -       | -         | P         | V       |
|                                     |                                                                                             | 7386      | 43.34      | -30.66 | 74         | 52.81      | 35.65          | 8.95      | 54.07         | -       | -         | P         | V       |
| Remark                              | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |        |            |            |                |           |               |         |           |           |         |



## 2.4GHz 2400~2483.5MHz

## WIFI 802.11n HT40 (Band Edge @ 3m)

| WIFI<br>Ant.<br>1                   | Note | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Margin<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Path<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|-------------------------------------|------|----------------------|---------------------|------------------|-----------------------------|---------------------------|-------------------------------|------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11n<br>HT40<br>CH 03<br>2422MHz |      | 2389.8               | 60.08               | -13.92           | 74                          | 56.93                     | 31.9                          | 4.91                   | 33.66                      | 144                  | 13                      | P                       | H               |
|                                     |      | 2389.94              | 48.68               | -5.32            | 54                          | 45.53                     | 31.9                          | 4.91                   | 33.66                      | 144                  | 13                      | A                       | H               |
|                                     | *    | 2422                 | 108.13              | -                | -                           | 104.81                    | 32.03                         | 4.94                   | 33.65                      | 144                  | 13                      | P                       | H               |
|                                     | *    | 2422                 | 100.07              | -                | -                           | 96.75                     | 32.03                         | 4.94                   | 33.65                      | 144                  | 13                      | A                       | H               |
|                                     |      | 2483.5               | 56.38               | -17.62           | 74                          | 52.88                     | 32.13                         | 4.99                   | 33.62                      | 144                  | 13                      | P                       | H               |
|                                     |      | 2483.83              | 43.16               | -10.84           | 54                          | 39.66                     | 32.13                         | 4.99                   | 33.62                      | 144                  | 13                      | A                       | H               |
|                                     |      | 2389.66              | 57.18               | -16.82           | 74                          | 54.03                     | 31.9                          | 4.91                   | 33.66                      | 366                  | 263                     | P                       | V               |
|                                     |      | 2389.94              | 46.4                | -7.6             | 54                          | 43.25                     | 31.9                          | 4.91                   | 33.66                      | 366                  | 263                     | A                       | V               |
|                                     | *    | 2422                 | 105.17              | -                | -                           | 101.85                    | 32.03                         | 4.94                   | 33.65                      | 366                  | 263                     | P                       | V               |
|                                     | *    | 2422                 | 97.23               | -                | -                           | 93.91                     | 32.03                         | 4.94                   | 33.65                      | 366                  | 263                     | A                       | V               |
|                                     |      | 2484.04              | 54.66               | -19.34           | 74                          | 51.16                     | 32.13                         | 4.99                   | 33.62                      | 366                  | 263                     | P                       | V               |
|                                     |      | 2483.62              | 42.41               | -11.59           | 54                          | 38.91                     | 32.13                         | 4.99                   | 33.62                      | 366                  | 263                     | A                       | V               |
| 802.11n<br>HT40<br>CH 06<br>2437MHz |      | 2389.8               | 56                  | -18              | 74                          | 52.85                     | 31.9                          | 4.91                   | 33.66                      | 113                  | 14                      | P                       | H               |
|                                     |      | 2389.94              | 43.7                | -10.3            | 54                          | 40.55                     | 31.9                          | 4.91                   | 33.66                      | 113                  | 14                      | A                       | H               |
|                                     | *    | 2437                 | 108.25              | -                | -                           | 104.82                    | 32.12                         | 4.96                   | 33.65                      | 113                  | 14                      | P                       | H               |
|                                     | *    | 2437                 | 99.99               | -                | -                           | 96.56                     | 32.12                         | 4.96                   | 33.65                      | 113                  | 14                      | A                       | H               |
|                                     |      | 2483.48              | 61.94               | -88.06           | 150                         | 58.44                     | 32.13                         | 4.99                   | 33.62                      | 113                  | 14                      | P                       | H               |
|                                     |      | 2483.55              | 48.47               | -5.53            | 54                          | 44.97                     | 32.13                         | 4.99                   | 33.62                      | 113                  | 14                      | A                       | H               |
|                                     |      | 2389.94              | 52.92               | -21.08           | 74                          | 49.77                     | 31.9                          | 4.91                   | 33.66                      | 359                  | 260                     | P                       | V               |
|                                     |      | 2389.94              | 41.55               | -12.45           | 54                          | 38.4                      | 31.9                          | 4.91                   | 33.66                      | 359                  | 260                     | A                       | V               |
|                                     | *    | 2437                 | 106.3               | -                | -                           | 102.87                    | 32.12                         | 4.96                   | 33.65                      | 359                  | 260                     | P                       | V               |
|                                     | *    | 2437                 | 98                  | -                | -                           | 94.57                     | 32.12                         | 4.96                   | 33.65                      | 359                  | 260                     | A                       | V               |
|                                     |      | 2484.04              | 59.55               | -14.45           | 74                          | 56.05                     | 32.13                         | 4.99                   | 33.62                      | 359                  | 260                     | P                       | V               |
|                                     |      | 2483.69              | 46.68               | -7.32            | 54                          | 43.18                     | 32.13                         | 4.99                   | 33.62                      | 359                  | 260                     | A                       | V               |



|                                     |                                                                                             |         |        |        |    |        |       |      |       |     |     |   |   |
|-------------------------------------|---------------------------------------------------------------------------------------------|---------|--------|--------|----|--------|-------|------|-------|-----|-----|---|---|
| 802.11n<br>HT40<br>CH 09<br>2452MHz |                                                                                             | 2388.68 | 52.91  | -21.09 | 74 | 49.76  | 31.9  | 4.91 | 33.66 | 113 | 14  | P | H |
|                                     |                                                                                             | 2389.38 | 40.95  | -13.05 | 54 | 37.8   | 31.9  | 4.91 | 33.66 | 113 | 14  | A | H |
|                                     | *                                                                                           | 2452    | 105.71 | -      | -  | 102.18 | 32.2  | 4.96 | 33.63 | 113 | 14  | P | H |
|                                     | *                                                                                           | 2452    | 97.85  | -      | -  | 94.32  | 32.2  | 4.96 | 33.63 | 113 | 14  | A | H |
|                                     |                                                                                             | 2484.53 | 62.46  | -11.54 | 74 | 58.96  | 32.13 | 4.99 | 33.62 | 113 | 14  | P | H |
|                                     |                                                                                             | 2483.5  | 50.51  | -3.49  | 54 | 47.01  | 32.13 | 4.99 | 33.62 | 113 | 14  | A | H |
|                                     |                                                                                             | 2388.12 | 52.67  | -21.33 | 74 | 49.52  | 31.9  | 4.91 | 33.66 | 360 | 262 | P | V |
|                                     |                                                                                             | 2388.26 | 40.42  | -13.58 | 54 | 37.27  | 31.9  | 4.91 | 33.66 | 360 | 262 | A | V |
|                                     | *                                                                                           | 2452    | 104.92 | -      | -  | 101.39 | 32.2  | 4.96 | 33.63 | 360 | 262 | P | V |
|                                     | *                                                                                           | 2452    | 96.93  | -      | -  | 93.4   | 32.2  | 4.96 | 33.63 | 360 | 262 | A | V |
|                                     |                                                                                             | 2483.97 | 60.03  | -13.97 | 74 | 56.53  | 32.13 | 4.99 | 33.62 | 360 | 262 | P | V |
|                                     |                                                                                             | 2483.76 | 48.18  | -5.82  | 54 | 44.68  | 32.13 | 4.99 | 33.62 | 360 | 262 | A | V |
| Remark                              | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |         |        |        |    |        |       |      |       |     |     |   |   |

**2.4GHz 2400~2483.5MHz**  
**WIFI 802.11n HT40 (Harmonic @ 3m)**

| WIFI                                | Note | Frequency | Level      | Margin | Limit      | Read     | Antenna  | Path   | Preamp | Ant    | Table   | Peak    | Pol.    |
|-------------------------------------|------|-----------|------------|--------|------------|----------|----------|--------|--------|--------|---------|---------|---------|
| Ant.                                |      |           |            |        | Line       | Level    | Factor   | Loss   | Factor | Pos    | Pos     | Avg.    |         |
| 1                                   |      | ( MHz )   | ( dBμV/m ) | ( dB ) | ( dBμV/m ) | ( dBμV ) | ( dB/m ) | ( dB ) | ( dB ) | ( cm ) | ( deg ) | ( P/A ) | ( H/V ) |
| 802.11n<br>HT40<br>CH 03<br>2422MHz |      | 4844      | 45.8       | -28.2  | 74         | 57.74    | 33.81    | 7.14   | 52.89  | -      | -       | P       | H       |
|                                     |      | 7266      | 43.68      | -30.32 | 74         | 53.46    | 35.61    | 8.75   | 54.14  | -      | -       | P       | H       |
|                                     |      | 4844      | 45.6       | -28.4  | 74         | 57.54    | 33.81    | 7.14   | 52.89  | -      | -       | P       | V       |
|                                     |      | 7266      | 43.28      | -30.72 | 74         | 53.06    | 35.61    | 8.75   | 54.14  | -      | -       | P       | V       |
| 802.11n<br>HT40<br>CH 06<br>2437MHz |      | 4874      | 45.9       | -28.1  | 74         | 57.75    | 33.8     | 7.19   | 52.84  | -      | -       | P       | H       |
|                                     |      | 7311      | 43.94      | -30.06 | 74         | 53.68    | 35.62    | 8.76   | 54.12  | -      | -       | P       | H       |
|                                     |      | 4874      | 46.62      | -27.38 | 74         | 58.47    | 33.8     | 7.19   | 52.84  | -      | -       | P       | V       |
|                                     |      | 7311      | 43.01      | -30.99 | 74         | 52.75    | 35.62    | 8.76   | 54.12  | -      | -       | P       | V       |
| 802.11n<br>HT40<br>CH 09<br>2452MHz |      | 4904      | 44.12      | -29.88 | 74         | 55.91    | 33.8     | 7.21   | 52.8   | -      | -       | P       | H       |
|                                     |      | 7356      | 43.92      | -30.08 | 74         | 53.5     | 35.64    | 8.87   | 54.09  | -      | -       | P       | H       |
|                                     |      | 4904      | 45.36      | -28.64 | 74         | 57.15    | 33.8     | 7.21   | 52.8   | -      | -       | P       | V       |
|                                     |      | 7356      | 43.48      | -30.52 | 74         | 53.06    | 35.64    | 8.87   | 54.09  | -      | -       | P       | V       |



|        |                                                                                             |
|--------|---------------------------------------------------------------------------------------------|
| Remark | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |
|--------|---------------------------------------------------------------------------------------------|

## 2.4GHz 2400~2483.5MHz

## Emission below 1GHz

## 2.4GHz WIFI 802.11n HT40 (LF)

| WIFI<br>Ant.<br>1               | Note                                                                       | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Margin<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | Antenna<br>Factor<br>( dB/m ) | Path<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>(P/A) | Pol.<br>(H/V) |
|---------------------------------|----------------------------------------------------------------------------|----------------------|---------------------|------------------|-----------------------------|-------------------------|-------------------------------|------------------------|----------------------------|----------------------|-------------------------|-----------------------|---------------|
| 2.4GHz<br>802.11n<br>HT40<br>LF |                                                                            | 48.43                | 18.86               | -21.14           | 40                          | 38                      | 15.23                         | 0.71                   | 35.08                      | -                    | -                       | P                     | H             |
|                                 |                                                                            | 149.31               | 19.07               | -24.43           | 43.5                        | 36.11                   | 16.79                         | 1.27                   | 35.1                       | -                    | -                       | P                     | H             |
|                                 |                                                                            | 249.22               | 27.33               | -18.67           | 46                          | 42.32                   | 18.35                         | 1.66                   | 35                         | -                    | -                       | P                     | H             |
|                                 |                                                                            | 268.62               | 32.97               | -13.03           | 46                          | 47.02                   | 19.19                         | 1.72                   | 34.96                      | -                    | -                       | P                     | H             |
|                                 |                                                                            | 480.08               | 23.17               | -22.83           | 46                          | 32.49                   | 23.04                         | 2.34                   | 34.7                       | -                    | -                       | P                     | H             |
|                                 |                                                                            | 787.57               | 29.78               | -16.22           | 46                          | 34.99                   | 26.04                         | 3.07                   | 34.32                      | -                    | -                       | P                     | H             |
|                                 |                                                                            | 43.58                | 30.51               | -9.49            | 40                          | 47.33                   | 17.55                         | 0.67                   | 35.04                      | -                    | -                       | P                     | V             |
|                                 |                                                                            | 111.48               | 23.02               | -20.48           | 43.5                        | 39.62                   | 17.49                         | 1.09                   | 35.18                      | -                    | -                       | P                     | V             |
|                                 |                                                                            | 178.41               | 22.16               | -21.34           | 43.5                        | 40.62                   | 15.28                         | 1.36                   | 35.1                       | -                    | -                       | P                     | V             |
|                                 |                                                                            | 268.62               | 26.2                | -19.8            | 46                          | 40.25                   | 19.19                         | 1.72                   | 34.96                      | -                    | -                       | P                     | V             |
|                                 |                                                                            | 370.47               | 21.58               | -24.42           | 46                          | 33.53                   | 20.87                         | 2.04                   | 34.86                      | -                    | -                       | P                     | V             |
|                                 |                                                                            | 691.54               | 27.43               | -18.57           | 46                          | 34.21                   | 24.88                         | 2.84                   | 34.5                       | -                    | -                       | P                     | V             |
| Remark                          | 1. No other spurious found.<br>2. All results are PASS against limit line. |                      |                     |                  |                             |                         |                               |                        |                            |                      |                         |                       |               |



## &lt;Simultaneous transmission&gt;

2.4GHz 2400~2483.5MHz

11n40\_TX\_CH09 2452MHz &amp; LTE Band7 (Band Edge @ 3m)

| WIFI Ant.                            | Note                                                                                        | Frequency | Level      | Over Limit | Limit Line | Read Level | Antenna Factor | Path Loss | Preamp Factor | Ant Pos | Table Pos | Peak Avg. | Pol.  |
|--------------------------------------|---------------------------------------------------------------------------------------------|-----------|------------|------------|------------|------------|----------------|-----------|---------------|---------|-----------|-----------|-------|
| 1+2                                  |                                                                                             | ( MHz )   | ( dBμV/m ) | ( dB )     | ( dBμV/m ) | (dBμV)     | ( dB/m )       | ( dB )    | ( dB )        | ( cm )  | ( deg )   | (P/A)     | (H/V) |
| 11n40_TX_CH09<br>2452MHz & LTE Band7 |                                                                                             | 2386.02   | 52.88      | -21.12     | 74         | 49.73      | 31.9           | 4.91      | 33.66         | 187     | 350       | P         | H     |
|                                      |                                                                                             | 2389.24   | 40.26      | -13.74     | 54         | 37.11      | 31.9           | 4.91      | 33.66         | 187     | 350       | A         | H     |
|                                      |                                                                                             | 2452      | 103.87     | -          | -          | 100.34     | 32.2           | 4.96      | 33.63         | 187     | 350       | P         | H     |
|                                      |                                                                                             | 2452      | 95.84      | -          | -          | 92.31      | 32.2           | 4.96      | 33.63         | 187     | 350       | A         | H     |
|                                      |                                                                                             | 2483.62   | 54.34      | -19.66     | 74         | 50.84      | 32.13          | 4.99      | 33.62         | 187     | 350       | P         | H     |
|                                      |                                                                                             | 2483.9    | 42.86      | -11.14     | 54         | 39.36      | 32.13          | 4.99      | 33.62         | 187     | 350       | A         | H     |
|                                      |                                                                                             | 2364.18   | 52.42      | -21.58     | 74         | 49.36      | 31.9           | 4.84      | 33.68         | 390     | 91        | P         | V     |
|                                      |                                                                                             | 2366.98   | 40.15      | -13.85     | 54         | 37.09      | 31.9           | 4.84      | 33.68         | 390     | 91        | A         | V     |
|                                      |                                                                                             | 2452      | 99.71      | -          | -          | 96.18      | 32.2           | 4.96      | 33.63         | 390     | 91        | P         | V     |
|                                      |                                                                                             | 2452      | 91.15      | -          | -          | 87.62      | 32.2           | 4.96      | 33.63         | 390     | 91        | A         | V     |
|                                      |                                                                                             | 2488.31   | 52.26      | -21.74     | 74         | 48.75      | 32.12          | 5.01      | 33.62         | 390     | 91        | P         | V     |
|                                      |                                                                                             | 2484.95   | 40.81      | -13.19     | 54         | 37.31      | 32.13          | 4.99      | 33.62         | 390     | 91        | A         | V     |
| Remark                               | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |            |            |            |                |           |               |         |           |           |       |



## 2.4GHz 2400~2483.5MHz

## 11n40\_TX\_CH09 2452MHz &amp; LTE Band7 (Harmonic @ 3m)

| WIFI                                    | Note                                                                                        | Frequency | Level      | Over   | Limit      | Read   | Antenna  | Path   | Preamp | Ant    | Table   | Peak  | Pol.  |
|-----------------------------------------|---------------------------------------------------------------------------------------------|-----------|------------|--------|------------|--------|----------|--------|--------|--------|---------|-------|-------|
| Ant.                                    |                                                                                             |           |            | Limit  | Line       | Level  | Factor   | Loss   | Factor | Pos    | Pos     | Avg.  |       |
| 1+2                                     |                                                                                             | ( MHz )   | ( dBμV/m ) | ( dB ) | ( dBμV/m ) | (dBμV) | ( dB/m ) | ( dB ) | ( dB ) | ( cm ) | ( deg ) | (P/A) | (H/V) |
| 11n40_TX_CH09<br>2452MHz &<br>LTE Band7 | *                                                                                           | 4904      | 44.38      | -29.62 | 74         | 56.17  | 33.8     | 7.21   | 52.8   | 187    | 350     | P     | H     |
|                                         |                                                                                             | 5052      | 49.82      | -24.18 | 74         | 61.29  | 33.9     | 7.32   | 52.69  | 187    | 350     | A     | H     |
|                                         |                                                                                             | 7356      | 44.5       | -29.5  | 74         | 54.08  | 35.64    | 8.87   | 54.09  | 187    | 350     | P     | H     |
|                                         |                                                                                             | 7578      | 47.71      | -26.29 | 74         | 56.9   | 35.7     | 9.06   | 53.95  | 187    | 350     | P     | H     |
|                                         |                                                                                             | 10104     | 49.16      | -24.84 | 74         | 54.37  | 36.98    | 10.66  | 52.85  | 187    | 350     | P     | H     |
|                                         | *                                                                                           | 4904      | 45.47      | -28.53 | 74         | 57.26  | 33.8     | 7.21   | 52.8   | 187    | 350     | A     | V     |
|                                         |                                                                                             | 5052      | 55.83      | -18.17 | 74         | 67.3   | 33.9     | 7.32   | 52.69  | 390    | 91      | P     | V     |
|                                         |                                                                                             | 7356      | 43.87      | -30.13 | 74         | 53.45  | 35.64    | 8.87   | 54.09  | 390    | 91      | A     | V     |
|                                         |                                                                                             | 7578      | 51.92      | -22.08 | 74         | 61.11  | 35.7     | 9.06   | 53.95  | 390    | 91      | P     | V     |
|                                         |                                                                                             | 10104     | 49.19      | -24.81 | 74         | 54.4   | 36.98    | 10.66  | 52.85  | 390    | 91      | P     | V     |
| Remark                                  | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |        |            |        |          |        |        |        |         |       |       |

## Note symbol

|     |                                                                                                                                                          |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| *   | <b>Fundamental Frequency</b> which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency. |
| !   | Test result is <b>Margin</b> line.                                                                                                                       |
| P/A | <b>Peak</b> or <b>Average</b>                                                                                                                            |
| H/V | <b>Horizontal</b> or <b>Vertical</b>                                                                                                                     |



A calculation example for radiated spurious emission is shown as below:

| WIFI    | Note | Frequency | Level      | Margin | Limit      | Read     | Antenna  | Path   | Preamp | Ant    | Table   | Peak    | Pol.    |
|---------|------|-----------|------------|--------|------------|----------|----------|--------|--------|--------|---------|---------|---------|
| Ant.    |      |           |            |        | Line       | Level    | Factor   | Loss   | Factor | Pos    | Pos     | Avg.    |         |
| 1       |      | ( MHz )   | ( dBμV/m ) | ( dB ) | ( dBμV/m ) | ( dBμV ) | ( dB/m ) | ( dB ) | ( dB ) | ( cm ) | ( deg ) | ( P/A ) | ( H/V ) |
| 802.11b |      | 2390      | 55.45      | -18.55 | 74         | 54.51    | 32.22    | 4.58   | 35.86  | 103    | 308     | P       | H       |
| CH 01   |      |           |            |        |            |          |          |        |        |        |         |         |         |
| 2412MHz |      | 2390      | 43.54      | -10.46 | 54         | 42.6     | 32.22    | 4.58   | 35.86  | 103    | 308     | A       | H       |

1. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB)

2. Level(dBμV/m) =

Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

3. Margin (dB) = Level(dBμV/m) – Limit Line(dBμV/m)

#### For Peak Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)

= 55.45 (dBμV/m)

2. Margin (dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

#### For Average Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)

= 43.54 (dBμV/m)

2. Margin (dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 43.54(dBμV/m) – 54(dBμV/m)

= -10.46(dB)

Both peak and average measured complies with the limit line, so test result is “PASS”.